

Idaho Greater Sage-Grouse

Draft Resource Management Plan Amendment
and

Environmental Impact Statement



US Department of the Interior,
Bureau of Land Management
May 2018



The Bureau of Land Management's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

Cover Photo: Steve Ting



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Idaho State Office
1387 South Vinnell Way
Boise, Idaho 83709-1657



APR 25 2018

In Reply Refer To:
1610/1793 (931)

Dear Reader:

The Idaho Draft Resource Management Plan Amendment (RMPA) and the Draft Environmental Impact Statement (EIS) is available for your review and comment. The Bureau of Land Management (BLM) prepared this document in consultation with cooperating agencies and in accordance with the National Environmental Policy Act of 1969, as amended, the Federal Land Policy and Management Act of 1976, as amended, implementing regulations, the BLM's Land Use Planning Handbook (H-1601-1), and other applicable law and policy.

The planning area includes the following BLM Idaho field offices: Owyhee, Four Rivers, Bruneau, Jarbidge, Burley, Shoshone, Pocatello, Upper Snake, Challis, and Salmon. The planning area encompasses approximately 11.4 million surface acres administered by the BLM and approximately 27 million subsurface acres in Ada, Adams, Bear Lake, Bingham, Blaine, Bonneville, Butte, Camas, Caribou, Cassia, Clark, Custer, Elmore, Fremont, Gem, Gooding, Jefferson, Jerome, Lemhi, Lincoln, Madison, Minidoka, Oneida, Owyhee, Payette, Power, Twin Falls, and Washington Counties.

As directed by the BLM Planning Regulations, the Management Alignment Alternative has been identified in the Draft EIS as the preferred alternative. Identification of the preferred alternative does not indicate any commitments on the part of the BLM with regard to a final decision. In developing the Proposed RMPA/Final EIS, which is the next phase of the planning process, the decision maker may select various management actions from each of the alternatives analyzed in the Draft RMPA/Draft EIS for the purpose of creating a management strategy that best meets the needs of the resources and values in this area under the BLM multiple use and sustained yield mandate.

The BLM encourages the public to review and provide comments on the Draft RMPA/Draft EIS. The Draft RMPA/Draft EIS is available on the project website at: <https://goo.gl/f94eKW>. Hard copies are also available for public review at BLM offices within the planning area.

Public comments will be accepted for ninety (90) calendar days following the Environmental Protection Agency's publication of its Notice of Availability in the *Federal Register*. The BLM can best utilize your comments and resource information submissions if received within the review period.

Written comments may be submitted as follows (submittal of electronic comments is encouraged):

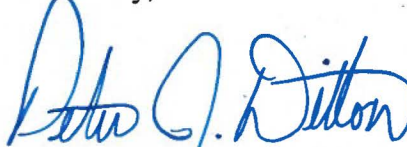
1. Written comments may be submitted electronically at:
<https://goo.gl/f94eKW>
2. Written comments may also be mailed directly, or delivered to, the BLM at:
Bureau of Land Management
Idaho State Office
Attn: Jonathan Beck
1387 S. Vinnell Way
Boise, Idaho 83709

To facilitate analysis of comments and information submitted, we encourage you to submit comments in an electronic format. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

Public meetings will be held at various locations around the planning area to provide the public with opportunities to submit comments and seek additional information. The locations, dates, and times of these meetings will be announce at least 15 days prior to the first meeting via a press release and on the project website: <https://goo.gl/f94eKW>

Thank you for your continued interest in the Greater Sage-Grouse RMPA. We appreciate the information and suggestions you contribute to the process.

Sincerely,



Peter J. Ditton
Acting Idaho State Director
Bureau of Land Management

**Idaho Greater Sage-Grouse
Draft Resource Management Plan Amendment and
Draft Environmental Impact Statement**

Responsible Agency: United States Department of the Interior
Bureau of Land Management

Abstract: This draft resource management plan (RMP) amendment and draft environmental impact statement (EIS) has been prepared by the United States Department of the Interior (DOI), Bureau of Land Management (BLM) with input from cooperating agencies. The purpose of this RMP amendment (RMPA) is to enhance cooperation with the States by modifying the approach to Greater Sage-Grouse management in existing RMPs to better align with individual state plans and/or conservation measures and DOI and BLM policy. This document is considering amendments to 23 BLM resource management plans in Idaho. The EIS describes and analyzes two alternatives for managing Greater Sage-Grouse habitat on approximately 8.8 million acres of BLM-administered surface estate and 27 million acres of BLM subsurface federal mineral estate. The No-Action Alternative is a continuation of current management; use of public lands and resources would continue to be managed under the current BLM RMPs, as amended in 2015. The Management Alignment Alternative was derived through coordination with the State and cooperating agencies to align with the State conservation plan and to support conservation outcomes for Greater Sage-Grouse. This is the agency's preferred alternative, though this does not constitute a final decision and there is no requirement that the preferred alternative identified in the draft EIS be selected as the agency's decision in the Record of Decision. Major planning issues addressed include Sagebrush Focal Area designations, habitat boundary designations, density and disturbance caps, habitat objectives, energy and minerals, and lands and realty.

Review Period: Comments on the Idaho Greater Sage-Grouse Draft Resource Management Plan Amendment and Draft Environmental Impact Statement will be accepted for 90 calendar days following publication of the United States Environmental Protection Agency's Notice of Availability in the *Federal Register*.

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ACRONYMS AND ABBREVIATIONS

Full Phrase

ARMPA	approved resource management plan amendment
BLM	Bureau of Land Management
BMP	best management practice
BSU	Biologically Significant Unit
CEQ	Council on Environmental Quality
CSU	controlled surface use
CHZ	Core Habitat Zone
DOI	US Department of the Interior
EIS	environmental impact statement
FLMPA	Federal Land Management and Policy Act
GHMA	General Habitat Management Area
GHZ	General Habitat Zone
IDFG	Idaho Department of Fish and Game
IHMA	Important Habitat Management Area
IHZ	Important Habitat Zone
LUPA	Land Use Plan Amendment
NEPA	National Environmental Policy Act
NSO	no surface occupancy
PHMA	Priority Habitat Management Area
RDF	required design feature
RMP	resource management plan
RMPA	resource management plan amendment
ROD	record of decision
ROW	right of way
SO	Secretarial Order
TL	timing limitation
USGS	US Geological Survey
USFWS	US Fish and Wildlife Service

Executive Summary

ES.I INTRODUCTION

Greater Sage-Grouse is a state-managed species that is dependent on sagebrush steppe ecosystems. These ecosystems are managed in partnership across the range of the Greater Sage-Grouse by federal, state, and local authorities. Efforts to conserve the species and its habitat date back to the 1950s. Over the past two decades, state wildlife agencies, federal agencies, and many others in the range of the species have been collaborating to conserve Greater Sage-Grouse and its habitats. The United States Department of the Interior (DOI) and the Bureau of Land Management (BLM) have broad responsibilities to manage federal lands and resources for the public benefit. Nearly half of Greater Sage-Grouse habitat is managed by the BLM.

In September 2015, the US Fish and Wildlife Service (USFWS) determined that the Greater Sage-Grouse did not warrant listing under the Endangered Species Act of 1973. In its “not warranted” determination, the USFWS based its decision in part on regulatory certainty from the conservation commitments and management actions in the BLM and US Forest Service (Forest Service) Greater Sage-Grouse land use plan amendments (LUPAs) and revisions, as well as on other private, state, and federal conservation efforts. Since 2015 the BLM, in discussion with partners, recognized that several refinements and policy updates would help strengthen conservation efforts, while providing increased economic opportunity to local communities.

The BLM continues to build upon its commitment to on-the-ground management to promote conservation through close collaboration with State governments, local communities, private landowners, and other stakeholders. **Table ES-I** shows the acres of on-the-ground treatment activity between 2015 and 2017 and planned for 2018, based upon annual budgets allocated by Congress. BLM’s accomplishments reflect contributions from programs other than Greater Sage-Grouse, including fuels, riparian, and range management.

Table ES-I
Acres of On-The-Ground Treatment Activity for Fiscal Years 2015 to 2017
and Planned for 2018

Fiscal Year	Conifer Removal	Fuelbreaks	Invasive Species Removal	Habitat Protection	Habitat Restoration	Total
2015	98,876	15,000	63,612	41,003	75,952	294,443
2016	165,963	14,614	66,621	42,305	95,748	385,251
2017	185,032	65,455	124,582	10,428	93,474	479,000
2018 ¹	118,384	65,442	68,512	9,240	54,509	316,087

¹Planned

The BLM is now engaged in a planning effort to further enhance its continued cooperation with western states by ensuring greater consistency between individual state plans and the BLM’s multiple-use mission. This executive summary highlights the major components of this planning document and outlines the potential impacts from the proposed management changes. The BLM’s efforts seek to improve

management alignment in ways that will increase management flexibility, maintain access to public resources, and promote conservation outcomes.

ES.2 PURPOSE OF AND NEED FOR ACTION

The BLM's purpose and need for this planning action helps define the scope of proposed alternative actions and issues the agency must analyze. In the Federal Land Policy and Management Act (FLPMA), Congress provided the BLM with discretion and authority to manage public lands for multiple use and sustained yield, and declared it the policy of the United States to coordinate the land use planning process with other Federal and state plans. Further, FLPMA specifically provides that it neither enlarges nor diminishes the authority of the States in managing fish and wildlife. As the sovereign with the lead role in managing game species, including Greater Sage-Grouse, states play a critical role in conserving and restoring the Greater Sage-Grouse and its habitat.

The purpose of this resource management plan amendment/environmental impact statement (RMPA/EIS) is to enhance cooperation with the states by modifying the approach to Greater Sage-Grouse management in existing RMPs to better align with individual state plans and/or conservation measures and DOI and BLM policy.

ES.3 ISSUES AND RELATED RESOURCE TOPICS IDENTIFIED THROUGH SCOPING

When deciding which issues to address related to the purpose and need, BLM considers points of disagreement, debate, or dispute regarding an anticipated outcome from a proposed action. Issues are based on anticipated environmental impacts; as such, issues can help shape the proposal and alternatives. The BLM used internal, agency, and public scoping to identify issues to consider in the environmental analysis. A summary of the scoping process is presented in Potential Amendments to Land Use Plans Regarding Greater Sage-Grouse Conservation Scoping Report (<https://goo.gl/FopNgW>).

The sections below lay out how issues raised during scoping, as well as related resource topics, are considered in this RMPA/EIS. Generally, they fall into the following categories:

- Issues and related resource topics retained for further consideration in this RMPA/EIS—These were issues raised during scoping for which alternatives were developed to address the issues..
- Clarification of decisions in the 2015 ARMPA/ROD—These are decisions or frameworks in the 2015 ARMPA/ROD that require clarification as to their application or implementation. No new analysis is required, as the intentions behind the decisions were analyzed in the 2015 Final EIS.
- Issues and resource topics not carried forward for additional consideration or analysis—These are issues brought up during scoping that are not carried forward in this RMPA/EIS. While some of these issues are considered in this RMPA/EIS, they do not require additional analysis because they were analyzed in the [2015 Final EIS](#). Others are not carried forward in this RMPA/EIS because they do not further the purpose of aligning with the State's conservation plan.

ES.3.1 Issues and Related Resource Topics Retained for Further Consideration in this RMPA/EIS

The issues identified in **Table ES-2**, below, were previously analyzed in the 2015 Final EIS; however, based on the proposed changes, the resource topics and potential impacts that may require additional analysis are as follows: Greater Sage-Grouse, mineral resources, livestock grazing, wild horses and

burros, lands and realty, recreation, and socioeconomics. Therefore, these resource topics are carried forward for analysis.

Table ES-2 identifies the corresponding resource topics to which the issues relate. The level of detail in the description of each resource topic and the impacts from implementing any of the alternatives also are described in **Chapters 3** and **4**.

Table ES-2
Issues and Related Resource Topics

Issue Number	Issues	Resource Topics Related to the Issues
1	Modifying Habitat Boundary Designations <ul style="list-style-type: none"> Integration of flexibility into the plans to be able to adjust habitat management area boundaries without the need for a plan amendment 	<ul style="list-style-type: none"> Greater Sage-Grouse
2	Sagebrush Focal Area Designations <ul style="list-style-type: none"> Sagebrush Focal Areas (SFA) duplicate many protections that are already in place through the designation of priority habitat management areas (PHMA). The SFA designation focuses on de minimis land use activities in Idaho, and does nothing to address the primary threats of wildfire and invasive species, nor do SFAs provide an appreciable benefit to Greater Sage-Grouse. SFAs also complicate the state's adaptive management process and negatively affect the economic viability of the state through land use prohibitions (i.e., locatable mineral withdrawal recommendation). 	<ul style="list-style-type: none"> Mineral Resources Greater Sage-Grouse Livestock Grazing Wild Horse & Burro
3	Adjusting Disturbance and Density Caps <ul style="list-style-type: none"> The project scale disturbance cap is overly complex and does not provide the flexibility to cluster multiple projects in one area of a Biologically Significant Unit; thus, penalizing project collocation. 	<ul style="list-style-type: none"> Greater Sage-Grouse Mineral Resources Lands and Realty Socioeconomics
4	Modifying Lek Buffers <ul style="list-style-type: none"> The application of uniform USGS lek buffers dilutes the efficacy of Idaho's unique, three-tiered habitat approach and does not provide an incentive to move development out of Greater Sage-Grouse priority habitat. Flexibility in lek buffer application should be based on site-specific information, habitat type, habitat quality, and type of development, not a one-size-fits-all approach. 	<ul style="list-style-type: none"> Greater Sage-Grouse Mineral Resources Lands and Realty Socioeconomics Livestock Grazing Recreation
5	Including Waivers, Exceptions, and Modifications on NSO Stipulations <ul style="list-style-type: none"> The no surface occupancy (NSO) requirement in PHMA should be consistent with the Governor's plan to include the flexibility of an exception, waiver, or modification process. 	<ul style="list-style-type: none"> Greater Sage-Grouse Fluid Minerals
6	Changing Requirements for Design Features <ul style="list-style-type: none"> The Required Design Features (RDFs) appendix is redundant and unclear, and does not provide managers the flexibility to apply the appropriate individual RDFs to address site-specific situations. 	<ul style="list-style-type: none"> Greater Sage-Grouse Mineral Resources Lands and Realty Socioeconomics Livestock Grazing
7	Modifying Habitat Objectives <ul style="list-style-type: none"> The Habitat Objectives table in the Idaho 2015 ROD/ARMPA is being interpreted and applied as standards and not objectives on the landscape. Clarification on its applicability and use are needed for each habitat indicator. 	<ul style="list-style-type: none"> Greater Sage-Grouse

Table ES-2
Issues and Related Resource Topics

Issue Number	Issues	Resource Topics Related to the Issues
8	Modifying Decisions for Livestock Grazing Commensurate with the Threat Posed <ul style="list-style-type: none"> Improper livestock grazing is a secondary threat in Idaho that should be managed using existing regulations. The USFWS's 2010 Warranted but Precluded determination recognized rangeland health standards as an adequate regulatory mechanism. The 2015 ROD/ARMPA imposes uniform and unnecessary grazing standards and does not incentivize proper livestock grazing (e.g., the grazing permit renewal thresholds requirement for allotments in SFAs is unnecessary). 	<ul style="list-style-type: none"> Livestock Grazing Greater Sage-Grouse
9	Modifying the Mitigation Strategy to Align with the State Mitigation Strategy, including Standard for No Net Loss <ul style="list-style-type: none"> The net gain mitigation standard is an elusive standard and creates no certainty to project proponents. The state can find no clear authority for the federal agencies to require a net conservation gain standard. Deference should be given to the state's mitigation framework. 	<ul style="list-style-type: none"> Greater Sage-Grouse

ES.3.2 Issues and Resource Topics Not Carried Forward for Additional Analysis (Scoping Issues Outside the Scope and Scoping Issues Previously Analyzed)

The following issues were raised during scoping and are not carried forward for a variety of reasons. For example, population-based management is not carried forward for detailed analysis because the BLM does not manage species populations; that authority falls under the jurisdiction of the Idaho Department of Fish and Game.

Other issues were analyzed in the 2015 Final EIS, and no significant new information related to these issues has emerged since that time. Therefore, the following issues do not require additional analysis in this RMPA/EIS:

- Restrictions on rights-of-way (ROWs) and infrastructure
- Wind energy development in PHMA
- ROW avoidance in PHMA and general habitat management areas (GHMA)
- Retention of lands as identified as PHMA or GHMA in federal ownership
- Prioritization of fluid mineral leases outside of PHMA and GHMA
- Numerical noise limitations within PHMA
- Vegetation treatments and wildfire response
- Habitat assessment framework

Other issues were evaluated as part of the 2015 Final EIS. For the same reasons they were dismissed in the 2015 Final EIS, they are not carried forward for detailed analysis in this RMPA/EIS (see Section 1.5.3, Planning Issues; Issues Not Addressed: Outside the Scope of the Planning Effort, pg. 1-36 in the 2015 Final EIS):

- Hunting Greater Sage-Grouse
- Predator control

- Aircraft overflights in PHMA/GHMA
- No cattle grazing in Greater Sage-Grouse habitat

The resource topics below are dismissed from detailed analysis because they have no potentially significant impacts from actions proposed in this RMPA/EIS:

- Geology
- Paleontological resources
- Indian Trust resources
- Noise

ES.4 ALTERNATIVES CONSIDERED

Alternatives development and analysis is the heart of an EIS. The alternatives considered in this document address all the issues brought forward by the public and considered by BLM. The comparative analysis between alternatives establishes a framework for decision makers to understand important trade-offs and identify the most effective way to meet the purpose and need and BLM's multiple use mission. The alternatives analysis can support the BLM in adapting its management when information and circumstances change.

ES.4.1 No-Action Alternative

Under the No-Action Alternative, the BLM would not amend the current RMPs amended by the Idaho and Montana Greater Sage-Grouse Resource Management Plan Amendment (2015 ROD/ARMPA). Greater Sage-Grouse habitat would continue to be managed under current management direction. Goals and objectives for BLM-administered lands and federal mineral estate would not change. Allowable uses and restrictions pertaining to activities such as mineral leasing and development, recreation, lands and realty, and livestock grazing would also remain the same.

ES.4.2 Management Alignment Alternative (Preferred Alternative)

This alternative is derived through coordination with the State and cooperating agencies to better align with the Idaho Governor's conservation plan and to support conservation outcomes for Greater Sage-Grouse. The BLM continues to build upon the 2015 planning effort as envisioned in Secretarial Order (SO) 3353 by collaborating with states and stakeholders to improve compatibility between federal management plans and other plans and programs at the state level, while ensuring consistency with the BLM's multiple use mission.

This enhanced cooperation between the BLM and the Governor's office will lead to improved management and coordination across the range of Greater Sage-Grouse. The Management Alignment Alternative aligns the 2015 ROD/ARMPA with the Governor's Plan by strategically removing or altering the specific points of contention while preserving those parts that were already in alignment with the substance of the Governor's Plan. All parts of the existing 2015 ROD/ARMPA in Idaho will remain in place except those specifically called out for change or deletion in this alternative.

At the request of the State, the Management Alignment Alternative in this Draft RMPA/EIS proposes a change to compensatory mitigation by modifying the net conservation gain standard that the BLM incorporated into its plans in 2015. The DOI and the BLM have also modified their mitigation policies

since the 2015 plans were finalized. The public did not have the opportunity to comment specifically on a net conservation gain approach to compensatory mitigation during the 2015 land use planning process. In addition, the DOI and the BLM are evaluating whether the implementation of compensatory mitigation standard on public lands is appropriate and consistent with applicable legal authorities. We request public comment about how the BLM should consider and implement mitigation with respect to the Greater Sage-Grouse, including alternative approaches to requiring compensatory mitigation in BLM land use plans.

Consistent with the Notice of Cancellation, which canceled the BLM's application to withdraw SFA from locatable mineral entry (82 *Federal Register* 195, October 11, 2017, p. 47248), this alternative would remove the recommendation for withdrawal. The effects of such action are included in **Chapter 4**.

In 2012 Governor C. L. "Butch" Otter proposed an approach that divided Greater Sage-Grouse habitat in Idaho into three management zones. These three zones provide a management continuum where the highest priority habitats have the most protections and the lowest priority habitats have the fewest protections and the most flexibility for multiple use management. This approach allows land management agencies to focus future disturbance in lower quality habitat or non-habitat areas. The 2015 ROD/ARMPA adopted this strategy and identified the habitat management zones as PHMA, important habitat management areas (IHMA), and GHMA; both alternatives in this RMPA/EIS continue this theme. To align with the Governor's Plan, the Management Alignment Alternative also provides a management continuum where the highest priority habitats have the most protections and the lowest priority habitats have the fewest protections and the most flexibility for multiple use management.

ES.5 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This section is a summary comparison of environmental consequences from implementing the No-Action Alternative and the Management Alignment Alternative. A detailed description of environmental consequences is included in **Chapter 4**, and a description of allocation changes between alternatives is found in **Chapter 2, Table 2-1**.

No-Action Alternative	Management Alignment Alternative
Greater Sage-Grouse	
<ul style="list-style-type: none"> • Buffer distances largest, providing the most protection from potential development in HMAs • Net conservation gain mitigation standard would increase Greater Sage-Grouse habitat over baseline • RDFs required in all HMAs 	<ul style="list-style-type: none"> • Buffers not required in GHMA • No net loss mitigation standard keeps Greater Sage-Grouse habitat at baseline • RDFs are considered BMPs and not required in GHMA
Lands and Realty	
<ul style="list-style-type: none"> • Development is limited in HMAs by buffers, RDFs, screening criteria, and a net conservation gain mitigation standard 	<ul style="list-style-type: none"> • The proposed changes would increase flexibility for development in IHMA and GHMA, potentially removing Greater Sage-Grouse habitat after a thorough review of the screening criteria.
Minerals	
<ul style="list-style-type: none"> • Fluid mineral development within SFAs is subject to NSO with no exception • This precludes fluid mineral development 	<ul style="list-style-type: none"> • Fluid mineral development in PHMA is subject to NSO stipulations, with limited exception • This allows mineral development subject to the exception criteria

No-Action Alternative	Management Alignment Alternative
Livestock Grazing	
<ul style="list-style-type: none"> • SFA designation requires prioritization of permit renewals and monitoring • SFA and PHMA require consideration of thresholds and responses during permit renewal 	<ul style="list-style-type: none"> • Removing the SFA designation has no effect because prioritization of permit renewals and monitoring continue in PHMA • The threshold requirement is removed and replaced with adaptive management, where livestock are determined to be a causal factor for not meeting land health standards
Wild Horse and Burro	
<ul style="list-style-type: none"> • SFA designation requires prioritization of gathers and monitoring 	<ul style="list-style-type: none"> • SFA removal would have no effect because prioritization of gathers and monitoring are required in PHMA
Recreation	
<ul style="list-style-type: none"> • No recreation facility development in PHMA and IHMA limits recreation opportunities 	<ul style="list-style-type: none"> • Recreation facility development allowed in PHMA and IHMA, subject to restrictions to protect Greater Sage-Grouse.

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Chapter I. Purpose of and Need for Action

I.1 INTRODUCTION

Greater Sage-Grouse is a state-managed species that depends on sagebrush steppe ecosystems. These ecosystems are managed in partnership across its range by federal, state, and local authorities. State agencies responsible for fish and wildlife management possess broad responsibility for protecting and managing fish, wildlife, and plants within their borders, except where preempted by federal law. Similarly, the DOI has broad responsibilities to manage federal lands and resources for the public's benefit. Approximately half of Greater Sage-Grouse habitat is managed by the BLM and Forest Service.

State agencies are at the forefront of efforts to maintain healthy fish and wildlife populations and to conserve at-risk species. State-led efforts to conserve the species and its habitat date back to the 1950s. For the past two decades, state wildlife agencies, federal agencies, and many others in the range of the species have been collaborating to conserve Greater Sage-Grouse and its habitats.

In 2010, USFWS determined that listing the Greater Sage-Grouse under the Endangered Species Act was “warranted, but precluded” by other priorities. In response, the BLM, in coordination with the DOI and the US Department of Agriculture, developed a management strategy that included targeted Greater Sage-Grouse management actions. In 2015, the agencies adopted land use plan amendments (LUPAs) and revisions to 98 BLM and Forest Service land use plans (LUPs) across ten western states. These LUPAs addressed, in part, threats to the Greater Sage-Grouse and its habitat. The amended LUPs govern the management of 67 million acres of Greater Sage-Grouse habitat on federal lands.

In September 2015, the USFWS determined that the Greater Sage-Grouse did not warrant listing under the Endangered Species Act of 1973. It attributed its 2010 “warranted, but precluded” determination primarily to “inadequate regulatory mechanisms.” In its 2015 conclusion of “not warranted,” the USFWS based its decision in part on regulatory certainty from the conservation commitments and management actions in the federal LUPAs and revisions, as well as on other private, state, and federal conservation efforts.

The BLM is currently implementing the 2015 Greater Sage-Grouse plans. The plans recommended that sagebrush focal areas (SFAs) be proposed for withdrawal; however, this proposed withdrawal was cancelled on October 11, 2017.

On March 29, 2017, the Secretary of the Interior issued SO 3349. It ordered agencies to reexamine practices “to better balance conservation strategies and policies with the equally legitimate need of creating jobs for hard-working Americans families.”

On June 7, 2017, the Secretary issued SO 3353 with a purpose of enhancing cooperation among eleven western states and the BLM in managing and conserving Greater Sage-Grouse. SO 3353 directed an Interior Review Team, consisting of the BLM, the USFWS, and US Geological Survey (USGS), to coordinate with the Sage-Grouse Task Force. They also were directed to review the 2015 Greater Sage-Grouse plans and associated policies to identify provisions that may require modification. This

would be done to make the plans more consistent with the individual state plans and better balance the BLM's multiple-use mission, as directed by SO 3349, American Energy Independence.

On August 4, 2017, the Interior Review Team submitted its Report in Response to Secretarial Order 3353. In this report the team recommended modifying the Greater Sage-Grouse plans and associated policies to better align with the individual state plans. On August 4, 2017, the Secretary issued a memo to the Deputy Secretary directing the BLM to implement the recommendations found in the report.

In the *Federal Register* of October 11, 2017, the BLM published the Notice of Intent to Amend Land Use Plans Regarding Greater Sage-Grouse Conservation and Prepare Associated Environment Impact Statements or Environmental Assessments.

During the public scoping period, the BLM sought public comments on whether all, some, or none of the 2015 Greater Sage-Grouse plans should be amended, what issues should be considered, and if plans should be completed at the state level rather than at the national level. In addition, the BLM recognizes that the Greater Sage-Grouse is a state-managed species that depends on sagebrush steppe habitats managed in partnership by federal, state, and local authorities. Input from state governors would weigh heavily when the BLM considers what management changes should be made and when ensuring consistency with the BLM's multiple-use mission.

I.2 PURPOSE OF AND NEED FOR ACTION

The BLM's purpose and need for this planning action helps define the scope of proposed alternative actions and issues the agency must analyze. In the Federal Land Policy and Management Act (FLPMA), Congress provided the BLM with discretion and authority to manage public lands for multiple use and sustained yield, and declared it the policy of the United States to coordinate the land use planning process with other federal and state plans. Further, FLPMA specifically provides that it neither enlarges nor diminishes the authority of the states in managing fish and wildlife. As the sovereign with the lead role in managing game species, including Greater Sage-Grouse, states play a critical role in conserving and restoring the Greater Sage-Grouse and its habitat.

The purpose of this resource management plan amendment/environmental impact statement (RMPA/EIS) is to enhance cooperation with the states by modifying the approach to Greater Sage-Grouse management in existing RMPs to better align with individual state plans and/or conservation measures and DOI and BLM policy.

I.3 PLANNING AREA AND CURRENT MANAGEMENT

Figure I-1 shows the planning area for this RMPA/EIS. See **Chapter 3, Affected Environment**, for a description of the planning area and current management.

PHMA are areas that meet some stage of the Greater Sage-Grouse life-cycle requirements, based on best available science. These broad habitat maps are necessary at the resource management plan-scale of planning in order to include a variety of important seasonal habitats and movement corridors that are spread across geographically diverse and naturally fragmented landscapes. Greater Sage-Grouse use multiple areas to meet seasonal habitat needs throughout the year and the resulting mosaic of habitats (e.g., winter, breeding, nesting, early brood-rearing, late brood-rearing, transitional, and movement

**Figure I-1
Planning Area and Habitat Management Areas**

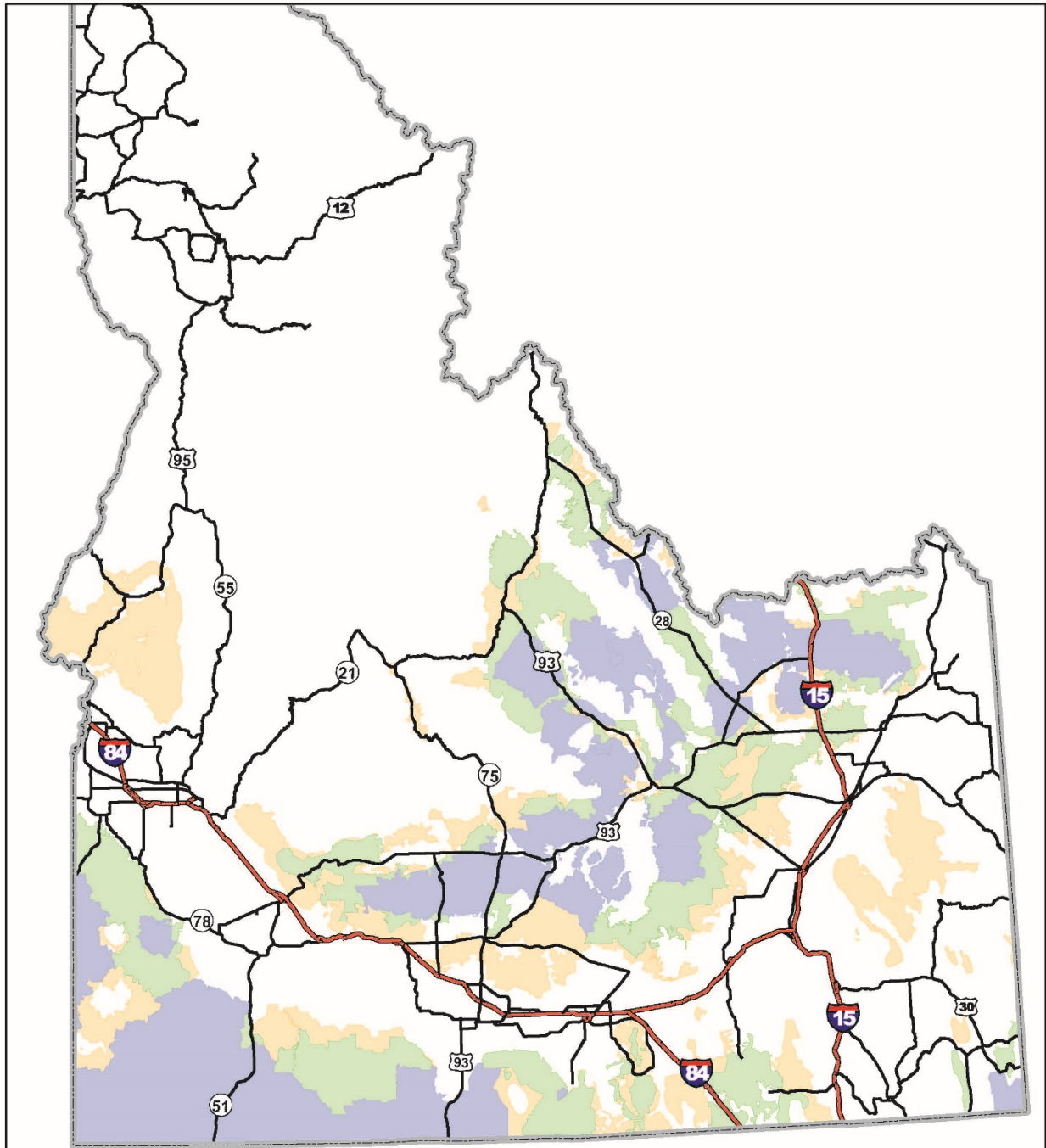


Figure X - Land Use Plan Amendment in Idaho



No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed. The following cannot be made Section 508 compliant. For help with its data or information, please contact the BLM Idaho State Office Webmaster at 208-373-4000.

Legend

Habitat Management Area

- Priority
- Important
- General

Date: 3/29/2018



Map Area



corridor habitats) can encompass large areas. Broad habitat maps increase the likelihood that all seasonal habitats (including transition and movement corridors) are included. While areas of non-habitat, in and of themselves, may not provide direct habitat value for Greater Sage-Grouse (e.g., canyons, water bodies, and human disturbances), these areas may be crossed by birds when moving between seasonal habitats. Therefore, these habitat management areas are not strictly about managing habitat but are about providing those large landscapes that are necessary to meet the life-stage requirements for Greater Sage-Grouse. These areas will include areas that do not meet the habitat requirements described in the Seasonal Habitat Objectives table in the 2015 Final EIS. These areas meet Greater Sage-Grouse habitat needs by maintaining large, contiguous expanses of relatively intact sagebrush vegetation community.

I.4 PLANNING CRITERIA

Planning criteria establish constraints, guidelines, and standards for the planning process and help the BLM define the scope of planning and analysis.

The following criteria are based on the standards prescribed by applicable laws and regulations, agency guidance, analysis pertinent to the planning area, professional judgment, and results of consultation and coordination with the public and other federal, state, and local agencies.

The BLM has identified these planning criteria:

- It will comply with all laws, regulations, policies, and guidance related to public lands management and implementing NEPA on BLM-administered lands.
- Greater Sage-Grouse is a state-managed species that depends on sagebrush steppe habitats managed in partnership by federal, state, and local authorities. In making management determinations on BLM-administered lands, the BLM will use, to the fullest extent practicable, state game and fish agencies' Greater Sage-Grouse data and expertise.
- Lands addressed in the RMPA/EIS will be BLM-administered land in Greater Sage-Grouse habitats, including surface and split-estate lands with federal subsurface mineral rights. Any decisions in the RMPA will apply only to BLM-administered lands.
- This RMPA/EIS will comply with orders of the Secretary, including SO 3353 (Greater Sage-Grouse Conservation and Cooperation with Western States), which strives for compatibility with state conservation plans.
- This RMPA/EIS will incorporate, as appropriate, information in a USGS report that identified and annotated Greater Sage-Grouse science published since January 2015 (Carter et al. 2018) and a report that synthesized and outlined the potential management implications of this new science (Hanser et al. 2018).
- This RMPA/EIS will comply with BLM Manual 6840, Special Status Species Management.
- This RMPA/EIS will recognize valid existing rights.
- All activities and uses in Greater Sage-Grouse habitats will be managed to achieve Greater Sage-Grouse objectives and land health standards.
- This RMPA/EIS will not amend more restrictive land use allocations or decisions for other resources under existing RMPs, such as wilderness study areas, areas of critical environmental concern, cultural resources, and riparian areas.

I.5 ISSUES AND RELATED RESOURCE TOPICS IDENTIFIED THROUGH SCOPING

When deciding which issues to address related to the purpose and need, BLM considers points of disagreement, debate, or dispute regarding an anticipated outcome from a proposed action. Issues are based on anticipated environmental effects; as such, issues can help shape the proposal and alternatives. The BLM used internal, agency, and public scoping to identify issues to consider in the environmental analysis. A summary of the scoping process is presented in a report titled Potential Amendments to Land Use Plans Regarding Greater Sage-Grouse Conservation Scoping Report (<https://goo.gl/FopNgW>).

When determining whether to retain an issue for more detailed analysis in this RMPA/EIS, the interdisciplinary team considered, among other things, the following:

- The environmental impacts associated with the issue and the threats to species and habitat associated with the issue are central to development of a Greater Sage-Grouse management plan or of critical importance.
- A detailed analysis of environmental impacts related to the issue is necessary to make a reasoned choice between alternatives.
- The environmental impacts associated with the issue are a significant point of contention among the public or other agencies.
- There are potentially significant impacts on resources associated with the issue.

Ultimately, it is important for decision-makers and the public to understand the impacts that each of the alternatives would have on specific resources; therefore, the BLM uses the resource topics that are tied to relevant issues as a heading to indicate which resources would be affected by a management change. Resource topics will help organize the discussions of the affected environment (**Chapter 3**) and environmental consequences (**Chapter 4**). Issues and resource topics will track in parallel structure throughout the affected environment and environmental consequences for easy reference.

The sections below lay out how issues raised during scoping, as well as related resource topics, that will be considered in this EIS. Generally, they fall into the following categories:

- Issues and related resource topics retained for further consideration in this RMPA/EIS—These were issues raised during scoping that are retained in this RMPA/EIS and for which alternatives were developed to address the issues. In some cases, the resolution in the alternatives were previously analyzed in the 2015 Final EIS; in other cases, additional analysis is needed in this RMPA/EIS. Because the issues were analyzed under resource topics in 2015, the resource topics corresponding with those retained for further analysis are also considered in this RMPA/EIS. Just like issues, they may have been analyzed in the 2015 Final EIS for those decisions being included in this RMPA/EIS.
- Clarification of decisions in the 2015 Approved Resource Management Plan Amendment (ARMPA)—These are decisions or frameworks in the 2015 ARMPA that require clarification as to their application or implementation. No new analysis is required, as the intentions behind the decisions were analyzed in the 2015 Final EIS.
- Issues and resource topics not carried forward for additional consideration or analysis—These are issues brought up during scoping that are not carried forward in this RMPA/EIS. While some of these issues are considered in this RMPA/EIS, they do not require additional analysis because

they were analyzed in the 2015 Final EIS. Others are not carried forward in this RMPA/EIS because they do not further the purpose of aligning with the state's conservation plan. Similar to issues, there are resource topics that are not retained for further analysis in this RMPA/EIS. This is because either they are not affected by the changes proposed in **Chapter 2** or because the effect was analyzed in the 2015 Final EIS.

I.5.1 Issues and Related Resource Topics Retained for Further Consideration in this RMPA/EIS

Table I-1 summarizes those issues below that were identified through scoping and that have been retained for consideration and additional discussion in **Chapters 3** and **4**.

The issues identified in **Table I-1** are significant because they address concerns raised by the Idaho Governor and are specific to aligning the 2015 ARMPA/ROD with the Governor of Idaho's Plan. **Table I-1** presents the issues as written by the Governor.

This amendment addresses the issues in **Table I-1** and provides focused changes to BLM management direction from the 2015 ROD/ARMPA to align with the Governor's Plan, as directed in SO 3353. The characterization of the affected environment in **Chapter 3** and the analysis in **Chapter 4** focus only on the resource topics related to the issues in **Table I-1**.

Table I-1
Issues and Related Resource Topics

Issue Number	Issues	Resource Topics Related to the Issues
1	Modifying Habitat Boundary Designations	<ul style="list-style-type: none"> Greater Sage-Grouse
	<ul style="list-style-type: none"> Integration of flexibility into the plans to be able to adjust habitat management area boundaries without the need for a plan amendment 	
2	Sagebrush Focal Area Designations	<ul style="list-style-type: none"> Mineral Resources Greater Sage-Grouse Livestock Grazing Wild Horse & Burro
	<ul style="list-style-type: none"> Sagebrush Focal Areas (SFA) duplicate many protections that are already in place through the designation of priority habitat management areas (PHMA). The SFA designation focuses on de minimis land use activities in Idaho, and does nothing to address the primary threats of wildfire and invasive species, nor do SFAs provide an appreciable benefit to Greater Sage-Grouse. SFAs also complicate the state's adaptive management process and negatively affect the economic viability of the state through land use prohibitions (i.e., locatable mineral withdrawal recommendation). 	
3	Adjusting Disturbance and Density Caps	<ul style="list-style-type: none"> Greater Sage-Grouse Mineral Resources Lands and Realty Socioeconomics
	<ul style="list-style-type: none"> The project scale disturbance cap is overly complex and does not provide the flexibility to cluster multiple projects in one area of a Biologically Significant Unit; thus, penalizing project collocation. 	
4	Modifying Lek Buffers	<ul style="list-style-type: none"> Greater Sage-Grouse Mineral Resources Lands and Realty Socioeconomics Livestock Grazing Recreation
	<ul style="list-style-type: none"> The application of uniform USGS lek buffers dilutes the efficacy of Idaho's unique, three-tiered habitat approach and does not provide an incentive to move development out of Greater Sage-Grouse priority habitat. Flexibility in lek buffer application should be based on site-specific information, habitat type, habitat quality, and type of development, not a one-size-fits-all approach. 	

**Table I-1
Issues and Related Resource Topics**

Issue Number	Issues	Resource Topics Related to the Issues
5	Including Waivers, Exceptions, and Modifications on NSO Stipulations <ul style="list-style-type: none"> The no surface occupancy (NSO) requirement in PHMA should be consistent with the Governor's plan to include the flexibility of an exception, waiver, or modification process. 	<ul style="list-style-type: none"> Greater Sage-Grouse Fluid Minerals
6	Changing Requirements for Design Features <ul style="list-style-type: none"> The Required Design Features (RDFs) appendix is redundant and unclear, and does not provide managers the flexibility to apply the appropriate individual RDFs to address site-specific situations. 	<ul style="list-style-type: none"> Greater Sage-Grouse Mineral Resources Lands and Realty Socioeconomics Livestock Grazing
7	Modifying Habitat Objectives <ul style="list-style-type: none"> The Habitat Objectives table in the Idaho 2015 ROD/ARMPA is being interpreted and applied as standards and not objectives on the landscape. Clarification on its applicability and use are needed for each habitat indicator. 	<ul style="list-style-type: none"> Greater Sage-Grouse
8	Modifying Decisions for Livestock Grazing Commensurate with the Threat Posed <ul style="list-style-type: none"> Improper livestock grazing is a secondary threat in Idaho that should be managed using existing regulations. The USFWS's 2010 Warranted but Precluded determination recognized rangeland health standards as an adequate regulatory mechanism. The 2015 ROD/ARMPA imposes uniform and unnecessary grazing standards and does not incentivize proper livestock grazing (e.g., the grazing permit renewal thresholds requirement for allotments in SFAs is unnecessary). 	<ul style="list-style-type: none"> Livestock Grazing Greater Sage-Grouse
9	Modifying the Mitigation Strategy to Align with the State Mitigation Strategy, including Standard for No Net Loss <ul style="list-style-type: none"> The net gain mitigation standard is an elusive standard and creates no certainty to project proponents. The state can find no clear authority for the federal agencies to require a net conservation gain standard. Deference should be given to the state's mitigation framework. 	<ul style="list-style-type: none"> Greater Sage-Grouse

I.5.2 Issues and Resource Topics Not Carried Forward for Additional Analysis (Scoping Issues Outside the Scope and Scoping Issues Previously Analyzed)

Issues and Related Resource Topics Not Carried Forward for Additional Analysis

The following issues were raised during scoping and are not carried forward for a variety of reasons. For example, population-based management is not carried forward for detailed analysis because the BLM does not manage species populations; that authority falls under the jurisdiction of the Idaho Department of Fish and Game.

Because the following issues were analyzed in the 2015 Final EIS, and no significant new information has emerged, they do not require additional analysis in this EIS. These issues were analyzed under most resource topics in the 2015 Final EIS. The related resource topics are dismissed from additional analysis. The types of impacts on these resources are described in the range of alternatives in the 2015 Final EIS. The impacts of implementing the alternatives in this RMPA/EIS are within the range of alternatives previously analyzed.

- Restrictions on ROWs and infrastructure
- Wind energy development in PHMA
- ROW avoidance in PHMA and GHMA
- Retention of lands as identified as PHMA or GHMA in federal ownership
- Prioritization of fluid mineral leases outside of PHMA and GHMA
- Numerical noise limitations within PHMA
- Vegetation treatments and wildfire response
- Habitat assessment framework

The following issues were evaluated as part of the 2015 Final EIS. For the same reasons they were dismissed in the 2015 Final EIS, similarly they are not carried forward for detailed analysis in this EIS (see Section I.5.3, Planning Issues; Issues Not Addressed: Outside the Scope of the Planning Effort, pg. I-36, in the Final EIS):

- Hunting Greater Sage-Grouse
- Predator control
- Aircraft overflights in PHMA and GHMA
- No cattle grazing in Greater Sage-Grouse habitat

Resource Topics Not Carried Forward for Additional Analysis

The resource topics below are dismissed from detailed analysis because they have no potentially significant impacts from actions proposed in this RMPA/EIS:

- Geology
- Paleontological resources
- Indian Trust resources
- Noise

I.6 RELATIONSHIP TO OTHER POLICIES, PLANS, AND PROGRAMS

The BLM recognizes the importance of state and local plans. The BLM will work to be consistent with or complementary to the management actions in these plans whenever possible.

I.6.1 State Plans

State plans considered during this planning are the following:

- Idaho Governor's Executive Order No. 2015-04 (Adopting Idaho's Sage-Grouse Management Plan)
- Idaho State Board of Land Commissioners Greater Sage-Grouse Conservation Plan

Chapter 2. Alternatives

2.1 INTRODUCTION

This chapter describes the alternatives evaluated as a part of this RMPA/EIS. This RMPA/EIS analyzes in detail the No-Action Alternative (No-Action) and one action alternative (Management Alignment Alternative), which meet the purpose and need presented in **Chapter 1**. In addition to the alternatives considered in detail, this chapter also describes an alternative considered but eliminated from detailed analysis.

Components of Alternatives

Goals are broad statements of desired outcomes and are not quantifiable or measurable. Objectives are specific measurable desired conditions or outcomes intended to meet goals. Goals and objectives can vary across alternatives, resulting in different allowable uses and management actions for some resources and resource uses.

Management actions and allowable uses are designed to achieve goals and objectives. Management actions are measures that guide day-to-day and future activities. Allowable uses delineate uses that are permitted, restricted, or prohibited, and may include stipulations or restrictions. Allowable uses also identify lands where specific uses are excluded to protect resource values, or where certain lands are open or closed in response to legislative, regulatory, or policy requirements. Implementation decisions are site-specific actions and are typically not addressed in RMPs.

2.2 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

2.2.1 Varying Constraints on Land Uses and Development Activities

During scoping, some commenters asked the BLM to consider additional constraints on land uses and ground-disturbing development activities to protect Greater Sage-Grouse habitat. These constraints are beyond those in the current management plan.¹ Other commenters, in contrast, asked the BLM to consider eliminating or reducing constraints on land uses, or incorporating other flexibilities into the BLM's implementation of RMPs, in addition to those issues that are already evaluated in the Management Alignment Alternative. The BLM considered every scoping comment and, where appropriate, incorporated these issues into the Management Alignment Alternative, following coordination with the State. Because the purpose and need for the BLM's action, building off of the 2015 ROD/ARMPA, is to enhance cooperation with the States by seeking to better align the BLM's RMPs with individual state plans and/or conservation measures, the BLM gave great weight to the States' identification of issues that warrant consideration in this planning effort.

This planning process does not revisit every issue that the BLM evaluated in 2015. Instead, the BLM now addresses refinements to the 2015 ROD/ARMPA decisions, consistent with the BLM's purpose and need

¹For example, this 2018 planning process, built upon the 2015 planning process, will continue to ensure that the BLM complies with its special status species policy, including the commitment to "implement measures to conserve [special status] species and their habitats...and promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA." (BLM Manual 6840, Special Status Species Management)

for action. Accordingly, this RMPA/EIS has its foundation in the comprehensive 2015 Final EIS and ROD/ARMPA and incorporates those documents by reference—including the entire range of alternatives evaluated through the 2015 planning process:

- Alternative A would have retained the management goals, objectives and direction specified in the BLM RMPs and the Forest Service land and resource management plans effective prior to the 2015 ROD/ARMPA.
- Alternative B was based on the conservation measures developed by the National Technical Team planning effort in Washington Office IM 2012-044. As directed in the IM, the conservation measures developed by the National Technical Team must be considered and analyzed, as appropriate, through the land use planning process and NEPA by all BLM state and field offices that contain occupied Greater Sage-Grouse habitat. Most management actions included in Alternative B would have been applied to PHMA.
- Alternative C was based on a citizen group's recommended alternative. This alternative emphasized improvement and protection of habitat for Greater Sage-Grouse and was applied to all occupied Greater Sage-Grouse habitat. Alternative C would have limited commodity development in areas of occupied Greater Sage-Grouse habitat and would have closed or designated portions of the planning area to some land uses.
- Alternative D, which was identified as the Preferred Alternative in the Draft RMPA/EIS, balanced opportunities to use and develop the planning area and protects Greater Sage-Grouse habitat based on scoping comments and input from cooperating agencies involved in the alternatives development process. Protective measures would have been applied to Greater Sage-Grouse habitat.
- Alternative E was the alternative provided by the State or Governor's offices for inclusion and analysis in the EISs. It incorporated guidance from specific State Conservation strategies and emphasized management of Greater Sage-Grouse seasonal habitats and maintaining habitat connectivity to support population objectives. This alternative was identified as a co-Preferred Alternative in the Idaho Draft EIS.
- Alternative F was also based on a citizen group-recommended alternative. This alternative emphasized improvement and protection of habitat for Greater Sage-Grouse and defined different restrictions for PHMA and GHMA. Alternative F would have limited commodity development in areas of occupied Greater Sage-Grouse habitat and would have closed or designated portions of the planning area to some land uses.
- The Proposed LUPA incorporated guidance from specific State Conservation strategies, as well as additional management based on the National Technical Team recommendations. This alternative emphasized management of Greater Sage-Grouse seasonal habitats and maintaining habitat connectivity to support population objectives.

The BLM considered the entire range of alternatives from the 2015 Final EIS to identify issues meriting reconsideration, given the BLM's goal of enhancing alignment with state plans. In this manner, the BLM will continue to appropriately manage Greater Sage-Grouse and its habitat through this planning effort in tandem with the 2015 ROD/ARMPA.

Further, additional constraints on land uses or development without a documented need would not meet the purpose of SO 3353. The BLM is did not discover new information that would indicate the agency should increase the level of conservation, management, and protection to achieve its land use plan objective. As part of the consideration of whether to amend the 2015 Greater Sage-Grouse RMPs, the BLM requested the USGS to develop an annotated bibliography of Greater Sage-Grouse science published since January 2015 (Carter et al. 2018; see **Section 3.1**). In addition, SO 3353 directs the BLM to promote habitat conservation, while contributing to economic growth and energy independence. As analyzed in the 2015 Final EIS (Section 4.15), all of the previously analyzed alternatives, including one proposing constraints stricter than the current management plan, were predicted to result in a loss of development opportunities on public lands.

2.3 DESCRIPTION OF ALTERNATIVES

BLM Idaho is proposing to amend the existing Greater Sage-Grouse management direction from the following Idaho Land Use Plans as directed by SO 3353 to bring BLM Greater Sage-Grouse management into alignment with the State of Idaho Plan:

- Bennett Hills/Timmerman Hills MFP (BLM 1980)
- Big Desert MFP (BLM 1981)
- Big Lost MFP (BLM 1983)
- Bruneau MFP (BLM 1983)
- Cascade RMP (BLM 1988)
- Cassia RMP (BLM 1985)
- Challis RMP (BLM 1999)
- Craters of the Moon National Monument RMP (BLM 2006)
- Four Rivers RMP Revision
- Jarbidge (2015)
- Jarbidge RMP (BLM 1987)
- Kuna MFP (BLM 1983)
- Lemhi RMP (BLM 1987)
- Little Lost-Birch Creek MFP (BLM 1981)
- Magic MFP (BLM 1975)
- Medicine Lodge RMP (BLM 1985)
- Monument RMP (BLM 1985)
- Owyhee RMP (BLM 1999)
- Pocatello RMP (BLM 2012)
- Snake River Birds of Prey National Conservation Area RMP (BLM 2008)
- Sun Valley MFP (BLM 1981)

- Twin Falls MFP (BLM 1982)
- Upper Snake RMP Revision

2.3.1 No-Action Alternative

Under the No-Action Alternative, the BLM would not amend the current RMPs amended by the Idaho and Montana Greater Sage-Grouse Resource Management Plan Amendment (2015 ROD/ARMPA). Greater Sage-Grouse habitat would continue to be managed under current management direction. Goals and objectives for BLM-administered lands and federal mineral estate would not change. Allowable uses and restrictions pertaining to activities such as mineral leasing and development, recreation, lands and realty, and livestock grazing would also remain the same.

2.3.2 Management Alignment Alternative

This alternative is derived through coordination with the State and cooperating agencies to better align with the Idaho Governor's conservation plan and to support conservation outcomes for Greater Sage-Grouse. The BLM continues to build upon the 2015 planning effort as envisioned in SO 3353 by collaborating with states and stakeholders to improve compatibility between federal management plans and other plans and programs at the state level, while ensuring consistency with the BLM's multiple use mission.

This enhanced cooperation between the BLM and the Governor's office will lead to improved management and coordination with states across the range of Greater Sage-Grouse. The Management Alignment Alternative aligns the 2015 ROD/ARMPA with the Governor's Plan by strategically removing or altering the specific points of contention while preserving those parts that were already in alignment with the substance of the Governor's Plan. All parts of the existing 2015 ROD/ARMPA in Idaho will remain in place except those specifically called out for change or deletion in this alternative. At the request of the State, the Management Alignment Alternative in this Draft RMPA/EIS proposes a change to compensatory mitigation by modifying the net conservation gain standard that the BLM incorporated into its plans in 2015. The DOI and the BLM have also modified their mitigation policies since the 2015 plans were finalized. The public did not have the opportunity to comment specifically on a net conservation gain approach to compensatory mitigation during the 2015 land use planning process. In addition, the DOI and the BLM are evaluating whether the implementation of compensatory mitigation standard on public lands is appropriate and consistent with applicable legal authorities. We request public comment about how the BLM should consider and implement mitigation with respect to the Greater Sage-Grouse, including alternative approaches to requiring compensatory mitigation in BLM land use plans.

Consistent with the Notice of Cancellation, which canceled the BLM's application to withdraw SFA from locatable mineral entry (82 *Federal Register* 195, October 11, 2017, p. 47248), this alternative would remove the recommendation for withdrawal. The effects of such action are included in **Chapter 4**.

In 2012 Governor C. L. "Butch" Otter proposed an approach that divided Greater Sage-Grouse habitat in Idaho into three management zones. These three zones provide a management continuum where the highest priority habitats have the most protections and the lowest priority habitats have the fewest protections and the most flexibility for multiple use management. This approach allows land management agencies to focus future disturbance in lower quality habitat or non-habitat areas. The 2015 ROD/ARMPA adopted this strategy and identified the habitat management zones as PHMA, IHMA, and GHMA; both alternatives in this RMPA/EIS continue this theme. To align with the Governor's Plan, the

Management Alignment Alternative also provides a management continuum where the highest priority habitats have the most protections and the lowest priority habitats have the fewest protections and the most flexibility for multiple use management.

2.4 COMPARATIVE SUMMARY OF ALTERNATIVES

The action alternatives propose retaining the decisions in the 2015 ROD/ARMPA unless they are specifically identified for change in the action alternative(s).

Table 2-1 displays the land use allocations for both the No-Action Alternative and the Management Alignment Alternative. The proposed changes would not result in differences between the two alternatives. The other proposed changes are more precise, as explained below.

Table 2-1
Summary Comparison of Alternatives

Resource	Alternative	PHMA	IHMA	GHMA
Land Tenure	No-Action Alternative	Retain	Retain	Retain
	Management Alignment Alternative			
Wind and Solar	No-Action Alternative	Exclusion	Avoidance	Open
	Management Alignment Alternative			
ROWs	No-Action Alternative	Avoidance	Avoidance	Open
	Management Alignment Alternative			
Oil and Gas and Geothermal	No-Action Alternative	Open with Major Stipulations	Open with Major Stipulations	Open with Standard Stipulations
	Management Alignment Alternative			
Nonenergy Leasables	No-Action Alternative	Closed	Open	Open
	Management Alignment Alternative			
Salable Minerals	No-Action Alternative	Closed with Limited Exceptions	Open	Open
	Management Alignment Alternative	Closed with Limited Exceptions		
Locatable Minerals	No-Action Alternative	Open	Open	Open
	Management Alignment Alternative			
Travel Management	No-Action Alternative	Limited	Limited	Limited
	Management Alignment Alternative			
Livestock Grazing	No-Action Alternative	Open	Open	Open
	Management Alignment Alternative			

2.5 COMPARISON OF ALTERNATIVES

Table 2-2, below, is organized by issue and provides a side-by-side comparison of the Management Alignment Alternative and the No-Action Alternative. The Management Alignment Alternative attempts to adjust the No-Action Alternative to bring it into alignment with the Idaho Governor's Sage-Grouse Plan while maintaining the format and all parts of the 2015 ROD/ARMPA that were not specifically identified as issues. To illustrate those changes, **words that would be deleted from the No-Action Alternative by the Management Alignment Alternative are in red** and **words that would be added in the Management Alignment Alternative are bold and underlined**.

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Table 2-2
Detailed Comparison of Alternatives

Topic	2015 ARMPA Decision Number	No-Action Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>	Management Alignment Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>
Habitat management area flexibility			
Habitat management area flexibility	MD SSS 6	The management area map and Biologically Significant Unit (BSU) baseline map will be reevaluated in conjunction with plan evaluation processes (i.e., approximately every 5 years). This reevaluation can indicate the need to adjust PHMA, IHMA, or GHMA or the habitat baseline. These adjustments can occur upon completion of the appropriate analysis and process (e.g., plan amendment) to review the allocation decisions based on the map. Results from the Wildfire and Invasive Species Assessments, such as identified focal or emphasis areas, will also be used to help inform mapping adjustments during this evaluation.	The management area map and Biologically Significant Unit (BSU) baseline map will be reevaluated in conjunction with plan evaluation processes (i.e., approximately every 5 years). This reevaluation can indicate the need to adjust Conservation Area Boundaries , PHMA, IHMA, or GHMA, or the habitat or population baselines. These adjustments can occur upon completion of the appropriate analysis and process (e.g., plan maintenance in coordination with the teams identified in MD SSS 44) to review the allocation decisions based on the map. Results from the Wildfire and Invasive Species Assessments, such as identified focal or emphasis areas, will also be used to help inform mapping adjustments during this evaluation.
Habitat management area flexibility	MD SSS 9	Areas of habitat outside of delineated habitat management areas identified during the Key habitat update process will be evaluated during site specific NEPA for project level activities and Greater Sage-Grouse required design features (Appendix C) and buffers (Appendix B) will be included as part of project design. These areas will be further evaluated during plan evaluation and the 5-year update to the management areas, to determine whether they should be included as PHMA, IHMA, or GHMA.	Delete
		Habitat Designations for PHMA, IHMA, and GHMA remain the same as mapped in the 2015 ARMPA.	<u>The boundaries of the habitat designations have been adjusted to correct administrative errors to the 2015 mapping. This includes removing some areas of non-habitat that were added to PHMA as part of the SFA designations. Additionally, in the West Owyhee Conservation Area, the circle of 60,706 acres of PHMA (Brown's Creek Area) that is surrounded by IHMA will be re-designated as IHMA (See Map I). 11,828 acres of PHMA would be changed to non-habitat, and 60,706 acres of PHMA would be changed to IHMA.</u>
	New MD SSS 44		<u>The BLM will, in collaboration with the Idaho Governor's Office of Species Conservation (OSC), Idaho Department of Fish and Game (IDFG), US Fish and Wildlife Service (USFWS), and potentially other state and federal agencies, form two teams (Technical Team and Policy Team), through an MOU, that will be responsible for review of proposed infrastructure developments, exceptions, variances, adaptive management triggers and responses, habitat management area adjustments, mitigation, etc. as described in detail in Appendix K.</u>
Removing Sagebrush Focal Area Designations			
SFA	MD SSS 10	MD SSS 10: Designate Sagebrush Focal Areas (SFA) as shown on Figure 1-2. SFA will be managed as PHMA, with the following additional management: <ul style="list-style-type: none"> Recommended for withdrawal from the General Mining Act of 1872, as amended, subject to valid existing rights. Managed as NSO, without waiver, exception, or modification, for fluid mineral leasing. Prioritized for vegetation management and conservation actions in these areas, including, but not limited to, land health assessments, wild horse and burro management actions, review of livestock grazing permits/leases, and habitat restoration (see specific management sections). 	Delete MD SSS 10 (no areas would be managed as SFA).
	MD MR 10	Recommend SFA for withdrawals from the General Mining Act of 1872, as amended, subject to valid existing rights.	Delete MD MR 10
	MD WHB 3	Prioritize gathers and population growth suppression techniques in HMAs in Greater Sage-Grouse habitat, unless removals are necessary in other areas to address higher priority environmental issues, including herd health impacts. Place higher priority on Herd Areas not allocated as HMAs and occupied by wild horses and burros in SFA followed by PHMA .	Prioritize gathers and population growth suppression techniques in HMAs in Greater Sage-Grouse habitat, unless removals are necessary in other areas to address higher priority environmental issues, including herd health impacts. Place higher priority on Herd Areas not allocated as HMAs and occupied by wild horses and burros in PHMA.
	MD WHB 4	In SFA and PHMA outside of SFA , assess and adjust AMLs through the NEPA process within HMAs when wild horses or burros are identified as a significant causal factor in not meeting land health standards, even if current AML is not being exceeded.	In PHMA, assess and adjust AMLs through the NEPA process within HMAs when wild horses or burros are identified as a significant causal factor in not meeting land health standards, even if current AML is not being exceeded.
	MD WHB 5	In SFAs and PHMA outside of SFA , monitor the effects of wild horse and burro use in relation to Greater Sage-Grouse seasonal habitat objectives on an annual basis to help determine future management actions.	In PHMA, monitor the effects of wild horse and burro use in relation to Greater Sage-Grouse seasonal habitat objectives on an annual basis to help determine future management actions.

Table 2-2
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	MD WHB 6	Develop or amend herd management area plans (HMAPs) to incorporate Greater Sage-Grouse habitat objectives and management considerations for all HMAs within Greater Sage-Grouse habitat, with emphasis placed on SFA and other PHMA.	Develop or amend herd management area plans (HMAPs) to incorporate Greater Sage-Grouse habitat objectives and management considerations for all HMAs within Greater Sage-Grouse habitat, with emphasis placed on PHMA.
Modifying Disturbance and Density Caps			
	MD SSS 27	<p>For Idaho and Montana, if the 3 percent anthropogenic disturbance cap is exceeded on lands (regardless of land ownership) within Greater Sage-Grouse PHMA (or IHMA in Idaho) Habitat Management Areas in any given BSU, then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the General Mining Law of 1872, as amended, valid existing rights, etc.) will be permitted by BLM within Greater Sage-Grouse PHMA and IHMA in any given BSU until the disturbance has been reduced to less than the cap, as measured according to the Disturbance and Adaptive Management Appendix (Appendix E) for the intermediate scale.</p> <p>For Idaho, if the 3 percent disturbance cap is exceeded on all lands (regardless of land ownership) within a proposed project analysis area (Appendix E) in a PHMA (or IHMA in Idaho), then no further anthropogenic disturbance will be permitted by BLM until disturbance in the proposed project analysis area has been reduced to maintain the area under the cap (subject to applicable laws and regulations, such as the General Mining Law of 1872, as amended, valid existing rights, etc.). For Montana, if the 3 percent disturbance cap is exceeded on lands (regardless of land ownership) or if anthropogenic disturbance and habitat loss associated with conversion to agricultural tillage or fire exceed 5% within a project analysis area in PHMA, then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the 1872 Mining Law, valid existing rights, etc.) will be permitted by BLM within PHMA in a project analysis area until the disturbance has been reduced to less than the cap. If the BLM determines that the State of Montana has adopted a Greater Sage-Grouse Habitat Conservation Program that contains comparable components to those found in the State of Wyoming's Core Area Strategy including an all lands approach for calculating anthropogenic disturbances, a clear methodology for measuring the density of operations, and a fully operational Density Disturbance Calculation Tool, the 3% disturbance cap will be converted to a 5% cap for all sources of habitat alteration within a project analysis area.</p> <p>In both Idaho and Montana, within existing designated utility corridors, the 3% disturbance cap may be exceeded at the project scale if the site specific NEPA analysis indicates that a net conservation gain to the species will be achieved. This exception is limited to projects which fulfill the use for which the corridors were designated (ex., transmission lines, pipelines) and the designated width of a corridor will not be exceeded as a result of any project co-location.</p> <p>For Idaho the BSU (Figure 2-2) is defined as the currently mapped nesting and wintering habitat within PHMA and IHMA within a Conservation Area, inclusive of all ownerships. For Montana the BSU is defined as the PHMA in Montana. Anthropogenic disturbance excludes habitat disturbance from wildfire and fuels management activities and includes the following developments (see Appendix E for further details):</p> <ul style="list-style-type: none"> • Oil and Gas Wells and Development Facilities • Coal Mines • Wind Towers • Solar Fields • Geothermal Development Facilities • Mining (Active Locatable, Non-Energy Leasable and Saleable Developments) • Roads • Railroads • Power lines • Communication Towers • Other Vertical Structures 	<p>If the 3 percent anthropogenic disturbance cap is exceeded on lands (regardless of landownership) within Greater Sage-Grouse PHMA (or IHMA in Idaho) habitat management areas in any given BSU, then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the General Mining Law of 1872, as amended, valid existing rights, etc.) will be permitted by BLM within Greater Sage-Grouse PHMA and IHMA in any given BSU until the disturbance has been reduced to less than the cap, as measured according to the Disturbance and Adaptive Management Appendix (Appendix E) for the intermediate scale.</p> <p>For Idaho, the BSU (Figure 2-2) is defined as the currently mapped nesting and wintering habitat within PHMA and IHMA within a Conservation Area, inclusive of all ownerships. Anthropogenic disturbance excludes habitat disturbance from wildfire and fuels management activities and includes the following developments (see Appendix E for further details):</p> <ul style="list-style-type: none"> • Oil and Gas Wells and Development Facilities • Coal Mines • Wind Towers • Solar Fields • Geothermal Development Facilities • Mining (Active Locatable, Nonenergy Leasable and Saleable Developments) • Roads • Railroads • Power Lines • Communication Towers • Other Vertical Structures • Coal Bed Methane Ponds • Meteorological Towers (e.g., wind energy testing) • Nuclear Energy Facilities • Airport Facilities and Infrastructure • Military Range Facilities and Infrastructure • Hydroelectric Plants • Recreation Areas Facilities and infrastructure <p>This disturbance is measured by direct footprint or by ROW width for linear features (power lines, pipelines, and roads).</p>

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		<ul style="list-style-type: none"> • Coal bed Methane Ponds • Meteorological Towers (e.g., wind energy testing) • Nuclear Energy Facilities • Airport Facilities and Infrastructure • Military Range Facilities and Infrastructure • Hydroelectric Plants • Recreation Areas Facilities and infrastructure <p>For Idaho this disturbance is measured by direct footprint or by ROW width for linear features (power lines, pipelines and roads). For Montana disturbance is measured similar to the Wyoming Disturbance Density Calculation Tool process described in Appendix E.</p> <p>Subject to applicable laws and regulations and valid existing rights, if the average density of one energy and mining facility per 640 acres (the density cap) is exceeded on all lands (regardless of land ownership) in the Priority Habitat Management Area within a proposed project analysis area, then no further disturbance from energy or mining facilities will be permitted by BLM: (1) until disturbance in the proposed project analysis area has been reduced to maintain the limit under the cap; or (2) unless the energy or mining facility is co-located into an existing disturbed area.</p>	
	MD SSS 29	<p>New anthropogenic disturbances within PHMA (Idaho only): Anthropogenic Disturbance Screening Criteria. In order to avoid surface-disturbing activities in PHMA, priority will be given to development (including ROWs, fluid minerals and other mineral resources subject to applicable stipulations) outside of PHMA. When authorizing development in PHMA, priority will be given to development in non-habitat areas first and then in the least suitable habitat for Greater Sage-Grouse. In addition to the PHMA and IHMA Anthropogenic Disturbance Development Criteria (MD SSS 30), the following criteria must all be met in the project screening and assessment process:</p> <ol style="list-style-type: none"> The population trend for the Greater Sage-Grouse within the associated Conservation Area is stable or increasing over a three-year period and the population levels are not currently engaging the adaptive management triggers (this applies strictly to new authorizations; renewals and amendments of existing authorizations will not be subject to this criteria when it can be shown that long-term impacts from those renewals or amendments will be substantially the same as the existing development); The development with associated mitigation will not result in a net loss of Greater Sage-Grouse Key habitat and mitigation will provide a net conservation benefit to the respective PHMA; The project and associated impacts will not result in a net loss of Greater Sage-Grouse Key habitat or habitat fragmentation or other impacts causing a decline in the population of the species within the relevant Conservation Area (the project will be outside Key habitat in areas not meeting desired habitat conditions or the project will provide a benefit to habitat areas that are functioning in a limited way as habitat); The development cannot be reasonably accomplished outside of the PHMA; or can be either: 1) developed pursuant to a valid existing authorization; or 2) is co-located within the footprint of existing infrastructure (proposed actions will not increase the 2011 authorized footprint and associated impacts more than 50 percent, depending on industry practice). Development will be implemented adhering to the required design features (RDF) described in Appendix C; The project will not exceed the disturbance cap (MD SSS 27) The project has been reviewed by the State Implementation Team and recommended for consideration by the Idaho Governor. 	<p>Subject to valid existing rights, new anthropogenic disturbances within PHMA (Idaho only): Anthropogenic Disturbance Screening Criteria. In order to avoid surface-disturbing activities in PHMA, priority will be given to development (including ROWs, fluid minerals, and other mineral resources subject to applicable stipulations) outside of PHMA. When authorizing development in PHMA, priority will be given to development in non-habitat areas first and then in the least suitable habitat for Greater Sage-Grouse. In addition to the PHMA and IHMA Anthropogenic Disturbance Development Criteria (MD SSS 30), the following criteria must all be met in the project screening and assessment process:</p> <ol style="list-style-type: none"> The population trend for the Greater Sage-Grouse within the associated Conservation Area is stable or increasing over a three-year period and the population levels are not currently engaging the adaptive management triggers (this applies strictly to new authorizations; renewals and amendments of existing authorizations will not be subject to this criteria when it can be shown that long-term impacts from those renewals or amendments will be substantially the same as the existing development); The development with associated mitigation will not result in a net loss of Greater Sage-Grouse key habitat or of the respective PHMA; The project and associated impacts will not result in a net loss of Greater Sage-Grouse key habitat or habitat fragmentation or other impacts causing a decline in the population of the species within the relevant Conservation Area. The development cannot be reasonably accomplished outside of the PHMA; or can be either: 1) developed pursuant to a valid existing authorization; or 2) is collocated within the footprint of existing infrastructure (proposed actions will not increase the 2011 authorized footprint and associated impacts more than 50 percent, depending on industry practice). Development will be implemented adhering to the required design features (RDF) described in Appendix C; The project will not exceed the disturbance cap (MD SSS 27) <u>Large scale anthropogenic disturbances will be reviewed by the Technical and Policy Teams as described in MD SSS 44. Large Scale Anthropogenic disturbance includes highways, high voltage transmission lines, commercial wind projects, energy development (e.g., oil and gas development, geothermal wells), airports, mines, cell phone towers, landfills, residential, and commercial subdivisions, etc.</u>

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Modifying Lek Buffers			
	MD SSS 35	In undertaking BLM management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the USGS Report Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review (Open File Report 2014-1239) in accordance with Appendix B.	In undertaking BLM management actions in PHMA and IHMA , and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the USGS Report Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review (Open File Report 2014-1239) lek buffer-distances in accordance with Appendix B. <u>The buffers do not apply to vegetation treatments specifically designed to improve or protect Greater Sage-Grouse habitat.</u>
Including Waivers, Exceptions, and Modifications on NSO Stipulations			
	MD MR 1	Idaho and Montana: Areas within SFA will be open to fluid mineral leasing and development and geophysical exploration subject to NSO without waiver, exception, or modification. Areas within PHMA (outside SFA) and IHMA will be open to mineral leasing and development and geophysical exploration subject to NSO with a limited exception (MD MR 3). GHMA will be open to mineral leasing and development and geophysical exploration subject to CSU which includes buffers and standard stipulations.	Areas within PHMA and IHMA will be open to mineral leasing and development and geophysical exploration subject to NSO with a limited exception (MD MR 3). GHMA will be open to mineral leasing and development and geophysical exploration subject to CSU which includes standard stipulations <u>and best management practices as identified in Appendix C.</u>
	MD MR 2	In Idaho, parcels nominated for lease in PHMA or IHMA will be evaluated prior to lease offering to determine if development is feasible. In GHMA, parcels will not be offered for lease if buffers and restrictions (including RDFs) preclude development in the leasing area.	In Idaho, parcels nominated for lease in PHMA, IHMA, or GHMA will be evaluated prior to lease offering to determine if development is feasible.
	MD MR 3	PHMA and IHMA: No waivers or modifications to a fluid mineral lease NSO stipulation will be granted. The Authorized Officer may grant an exception to a fluid mineral lease NSO stipulation only where the proposed action: <ul style="list-style-type: none"> i. Would not have direct, indirect, or cumulative effects on Greater Sage-Grouse or its habitat; or, ii. Is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and would provide a clear conservation gain to Greater Sage-Grouse. <p>Exceptions based on conservation gain (ii) may only be considered in (a) PHMAs of mixed ownership where federal minerals underlie less than fifty percent of the total surface, or (b) areas of the public lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid Federal fluid mineral lease existing as of the date of this RMP amendment. Exceptions based on conservation gain must also include measures, such as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.</p> <p>Any exceptions to this lease stipulation may be approved by the Authorized Officer only with the concurrence of the State Director. The Authorized Officer may not grant an exception unless the applicable state wildlife agency, the USFWS, and the BLM unanimously find that the proposed action satisfies (i) or (ii). Such finding shall initially be made by a team of one field biologist or other Greater Sage-Grouse expert from each respective agency. In the event the initial finding is not unanimous, the finding may be elevated to the appropriate BLM State Director, USFWS State Ecological Services Director, and state wildlife agency head for final resolution. In the event their finding is not unanimous, the exception will not be granted. Approved exceptions will be made publicly available at least quarterly.</p>	PHMA and IHMA: No waivers or modifications to a fluid mineral lease NSO stipulation will be granted. The Authorized Officer may grant an exception to a fluid mineral lease NSO stipulation only where the proposed action: <ul style="list-style-type: none"> i. Would not have direct, indirect, or cumulative effects on Greater Sage-Grouse or its habitat; or, ii. Is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and would provide no net loss to Greater Sage-Grouse. <p>Exceptions based on no net loss (ii) may only be considered in (a) PHMA of mixed ownership where federal minerals underlie less than fifty percent of the total surface, or (b) areas of the public lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid Federal fluid mineral lease existing as of the date of this RMP amendment. Exceptions based on no net loss must also include measures, such as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.</p> <p>Any exceptions to this lease stipulation may be approved by the Authorized Officer, only with the concurrence of the State Director <u>and in coordination with the Technical and Policy Team.</u> Approved exceptions will be made publicly available.</p>
	MD MR 8	Issue Written Orders of the Authorized Officer (43 CFR 3161.2) requiring reasonable protective measures consistent with the lease terms where necessary to avoid or minimize impacts on Greater Sage-Grouse populations or habitat.	Delete MD MR 8
Changing Requirements for Design Features			
	MD SSS 32	Incorporate RDFs as described in Appendix C in the development of project or proposal implementation, reauthorizations or new authorizations and suppression activities, as conditions of approval (COAs) into any post-lease activities and as best management practices for locatable minerals activities, to the extent allowable by law, unless at least one of the following conditions can be demonstrated and documented in the	In PHMA and IHMA , incorporate RDFs as described in Appendix C in the development of project or proposal implementation, reauthorizations or new authorizations and suppression activities, as conditions of approval (COAs) into any post-lease activities and as best management practices for locatable minerals activities, to the extent allowable by law, unless at least one of the following conditions can be

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		NEPA analysis associated with the specific project: a. A specific RDF is not applicable to the site-specific conditions of the project or activity; b. A proposed design feature or BMP is determined to provide equal or better protection for Greater Sage-Grouse or its habitat; or c. Analysis concludes that following a specific RDF will provide no more protection to Greater Sage-Grouse or its habitat than not following it, for the project being proposed.	demonstrated and documented in the NEPA analysis associated with the specific project: a. A specific RDF is not applicable to the site-specific conditions of the project or activity; b. A proposed design feature or BMP is determined to provide equal or better protection for Greater Sage-Grouse or its habitat; or c. Analysis concludes that following a specific RDF will provide no more protection to Greater Sage-Grouse or its habitat than not following it, for the project being proposed. <u>In GHMA, incorporate RDFs as best management practices in the development of project or proposal implementation, reauthorizations or new authorizations, suppression activities, post-lease activities, and locatable minerals activities.</u>
	MD MR 11	PHMA: PHMA are closed to new mineral materials sales . However, these areas remain “open” to free use permits and the expansion of existing active pits only if the following criteria are met. <ul style="list-style-type: none"> the project area disturbance cap is not exceeded within a BSU; the activity is subject to the provisions set forth in the mitigation framework [Appendix F]; all applicable required design features are applied; and the activity is permissible under the Idaho exception and development criteria (MD SSS 29 and MD SSS 30) IHMA: All IHMA will be open to mineral materials development, consistent with the Idaho Anthropogenic Disturbance Criteria (MD SSS 30), and subject to RDFs, and buffers. Sales from existing community pits within IHMA will be subject to seasonal timing restrictions (Appendix C). GHMA: All GHMA will be open to mineral materials development, subject to RDFs and buffers. Sales from existing community pits within GHMA will be subject to seasonal timing restrictions (Appendix C). 	PHMA: All PHMA will be closed to new mineral materials development, but continued use of existing pits will be allowed. New free use permits and the expansion of existing pits may be considered only if the following criteria are met: <ul style="list-style-type: none"> The disturbance cap is not exceeded within a BSU. The activity is subject to the provisions set forth in the mitigation framework (Appendix F). All applicable required design features are applied. The activity is permissible under the Idaho exception and development criteria (MD SSS 29 and MD SSS 30). IHMA: All IHMA will be open to mineral materials development, consistent with the Idaho Anthropogenic Disturbance Criteria (MD SSS 30), and subject to RDFs and buffers. Sales from existing community pits within IHMA will be subject to seasonal timing restrictions (Appendix C). GHMA: All GHMA will be open to mineral materials development, subject to best management practices as described in Appendix C. Sales from existing community pits within GHMA will be subject to seasonal timing restrictions (Appendix C).
	MD MR 15	PHMA are closed to leasing. IHMA and GHMA: Areas within Known Phosphate Leasing Areas (KPLAs) will remain open to leasing subject to standard stipulations. IHMA areas outside of KPLAs are open to prospecting and subsequent leasing provided the Anthropogenic Disturbance Development Criteria (MD SSS 30) and the anthropogenic disturbance cap (MD SSS 27) can be met. RDFs and buffers shall be applied to prospecting permits. GHMA: Lands outside KPLAs are available for prospecting and subsequent leasing and initial mine development subject to RDFs, buffers, and standard stipulations.	PHMA are closed to leasing. IHMA and GHMA: Areas within Known Phosphate Leasing Areas (KPLAs) will remain open to leasing subject to standard stipulations. IHMA areas outside of KPLAs are open to prospecting and subsequent leasing provided the Anthropogenic Disturbance Development Criteria (MD SSS 30) and the anthropogenic disturbance cap (MD SSS 27) can be met. RDFs and buffers shall be applied to prospecting permits. GHMA: Lands outside KPLAs are available for prospecting and subsequent leasing and initial mine development subject to standard stipulations and best management practices as described in Appendix C .
	MD RE 1	PHMA: Designate and manage PHMA as exclusion areas for utility scale (20 MW) wind and solar testing and development, nuclear and hydropower energy development. IHMA: Designate and manage IHMA as avoidance areas for wind and solar testing and development, nuclear and hydropower development. GHMA (Idaho) : Designate and manage GHMA as open for wind and solar testing and development and nuclear and hydropower development subject to RDFs and buffers . GHMA (Montana): Designate and manage GHMA as avoidance for wind and solar testing and development and nuclear and hydropower development.	PHMA: Designate and manage PHMA as exclusion areas for utility scale (20 MW) wind and solar testing and development, and nuclear and hydropower energy development. IHMA: Designate and manage IHMA as avoidance areas for wind and solar testing and development, and nuclear and hydropower development. GHMA (Idaho) : Designate and manage GHMA as open for wind and solar testing and development, and nuclear and hydropower development.
	MD LR 2	PHMA: Designate and manage PHMA as ROW avoidance areas, consistent with MD SSS 29 and subject to RDFs and buffers (Appendices B and C). IHMA: Designate and manage IHMA as ROW avoidance areas, consistent with MD SSS 30 and subject to RDFs and buffers. GHMA (Idaho and Montana) : Designate and manage GHMA as open with proposals subject to RDFs and buffers .	PHMA: Designate and manage PHMA as ROW avoidance areas, consistent with MD SSS 29 and subject to RDFs and buffers (Appendices B and C). IHMA: Designate and manage IHMA as ROW avoidance areas, consistent with MD SSS 30 and subject to RDFs and buffers. GHMA: Designate and manage GHMA as open with proposals subject to best management practices as described in Appendix C .
Modifying Habitat Objectives			
	SSS OBJ 2	The Habitat Objectives for Greater Sage-Grouse (the Habitat Objectives table (Table 2-2) in the 2015 Final EIS) is a list of indicators, characteristics, and values that describe Greater Sage-Grouse seasonal	<u>Within PHMA and IHMA, maintain large intact sagebrush steppe communities with vegetative characteristics consistent with their ecological potential such that Greater Sage-</u>

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		<p>habitat use areas. The BLM used indicator values derived from a synthesis of local and regional Greater Sage-Grouse habitat research and data to describe the typical vegetation communities that Greater Sage-Grouse select. While the habitat objectives are not attainable on every site or every acre within designated Greater Sage-Grouse habitat management areas, the values reflect a range of habitat conditions that generally lead to greater survival of individuals within a population. When permitting land use activities, BLM should consider the ecological site potential within designated habitat management areas to validate the habitat conditions achievable for a specific site.</p> <p>The seasonal habitat descriptions in Table 2-2 [the Habitat Objectives table in the 2015 Final EIS] vary across the range of Greater Sage-Grouse, within a subregion, and between sites. They are not land health standards but are quantitative measures that inform the Special Status Species Habitat Land Health Standard for Greater Sage-Grouse. These measurable values reflect ecological potential, and may be adjusted based on local factors influencing Greater Sage-Grouse habitat selection. Local data or recent science may indicate that Greater Sage-Grouse select for vegetation structure and composition in seasonal habitats not characterized by the values in the habitat objectives table. In these cases, it may be appropriate to adjust the values. Habitat objectives should be evaluated in the context of annual variability in ecological conditions and should not be used singly to determine habitat suitability for Greater Sage-Grouse. They may be used to demonstrate trends over time, during plan evaluations for effectiveness of Greater Sage-Grouse conservation, or when identifying limiting habitat characteristics for a given area.</p> <p>The indicators, characteristics, values, and desired seasonal habitat conditions in the Greater Sage-Grouse Plan Habitat Objectives Table are meant to inform the wildlife habitat component of the Land Health Standards evaluation process (LHS, 43 CFR 4180.2), but do not replace rangeland health assessments. Results from the LHS evaluation should be used to support BLM in land use authorization processes and during development of objectives for management actions such as vegetation treatments. BLM land use authorizations will contain terms and conditions regarding the actions needed to achieve or make progress toward achieving habitat objectives and land health standards.</p> <p>The Habitat Objectives Tables are to be used:</p> <ul style="list-style-type: none"> • To assess habitat suitability for Greater Sage-Grouse following the BLM policy on Greater Sage-Grouse habitat assessments • To evaluate land use plan effectiveness for Greater Sage-Grouse conservation • As a basis to develop measurable project objectives for actions in BLM-designated Greater Sage-Grouse Habitat Management areas when considered alongside land health standards, ecological potential and local information. 	<p><u>Grouse can select suitable seasonal habitats for breeding, nesting, rearing young, and wintering.</u></p> <p><u>Greater Sage-Grouse actively select suitable use areas within large intact sagebrush ecosystems. Not every site will provide for every Greater Sage-Grouse need, which is why they require large intact sagebrush ecosystems.</u></p> <p>The habitat objectives for Greater Sage-Grouse (the Habitat Objectives table (Table 2-2) in the 2015 Final EIS) are a list of indicators, characteristics, and values that describe Greater Sage-Grouse seasonal habitat use areas. The BLM used indicator values derived from a synthesis of local and regional Greater Sage-Grouse habitat research and data to describe the typical vegetation communities that Greater Sage-Grouse select. While the habitat objectives are not attainable on every site or every acre within designated Greater Sage-Grouse habitat management areas, the values reflect a range of habitat conditions that generally lead to greater survival of individuals within a population. When permitting land use activities, the BLM shall consider the ecological site potential within designated habitat management areas to validate the habitat conditions achievable for a specific site.</p> <p>The seasonal habitat descriptions in Table 2-2 [the Habitat Objectives table in the 2015 Final EIS] vary across the range of Greater Sage-Grouse, within a subregion, and between sites. They are not land health standards but are quantitative measures that help inform the Special Status Species Habitat Land Health Standard for Greater Sage-Grouse. These measurable values reflect ecological potential, and may be adjusted based on local factors influencing Greater Sage-Grouse habitat selection. Local data or recent science may indicate that Greater Sage-Grouse select for vegetation structure and composition in seasonal habitats not characterized by the values in the habitat objectives table. In these cases, it may be appropriate to adjust the values. Habitat objectives should be evaluated in the context of annual variability in ecological conditions and should not be used singly to determine habitat suitability for Greater Sage-Grouse. They may be used to demonstrate trends over time, during plan evaluations for effectiveness of Greater Sage-Grouse conservation, or when identifying limiting habitat characteristics for a given area.</p> <p>The indicators, characteristics, values, and desired seasonal habitat conditions in the Greater Sage-Grouse Plan Habitat Objectives Table are meant to inform the wildlife habitat component of the Land Health Standards evaluation process (LHS, 43 CFR 4180.2), but do not replace rangeland health assessments. Results from the LHS evaluation should be used to support the BLM in land use authorization processes and during development of appropriate objectives for management actions such as vegetation treatments. BLM land use authorizations will contain terms and conditions regarding the actions needed to achieve or make progress toward achieving habitat objectives and land health standards.</p> <p>The Habitat Objectives Tables are to be used:</p> <ul style="list-style-type: none"> • To assess habitat suitability for Greater Sage-Grouse following the BLM policy on Greater Sage-Grouse habitat assessments • To evaluate land use plan effectiveness for Greater Sage-Grouse conservation • As a basis to develop measurable project objectives for actions in BLM-designated Greater Sage-Grouse habitat management areas when considered alongside land health standards, ecological potential, and local information

Table 2-2
Detailed Comparison of Alternatives

Topic	2015 ARMPA Decision Number	No-Action Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>	Management Alignment Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>																
		<p>Excerpt from Table 2.2</p> <table border="1"> <thead> <tr> <th colspan="4">NESTING/EARLY BROOD REARING (Seasonal Use Period May 1–June 30)</th></tr> </thead> <tbody> <tr> <td>Cover and Food</td><td>Perennial grass (and forb) height (includes residual grasses)</td><td>≥ 7 inches</td><td>Connelly et al. 2000⁸ Connelly et al. 2003⁹ Hagen et al. 2007¹¹ Stiver et al. 2015¹³</td></tr> </tbody> </table> <p>References: US Department of the Interior, Bureau of Land Management. 2001. Rangeland Health Standards Handbook H-4180-1. https://www.blm.gov/sites/blm.gov/files/uploads/MediaLibraryBLMPolicyh4180-1.pdf.</p> <p>(The Habitat Objectives table (Table 2-2) is in the 2015 ROD/ARMPA, Section 2.2.1 Page 2-5 through 2-6)</p>	NESTING/EARLY BROOD REARING (Seasonal Use Period May 1–June 30)				Cover and Food	Perennial grass (and forb) height (includes residual grasses)	≥ 7 inches	Connelly et al. 2000 ⁸ Connelly et al. 2003 ⁹ Hagen et al. 2007 ¹¹ Stiver et al. 2015 ¹³	<p>Excerpt from Table 2.2</p> <table border="1"> <thead> <tr> <th colspan="4">NESTING/EARLY BROOD REARING (Seasonal Use Period May 1–June 30)</th></tr> </thead> <tbody> <tr> <td>Cover and Food</td><td>Perennial grass (and forb) height (includes residual grasses)</td><td>Adequate Residual Nesting Cover</td><td>Connelly et al. 2000⁸ Connelly et al. 2003⁹ Hagen et al. 2007¹¹ Stiver et al. 2015¹³ Hausleitner 2003; Holloran et al. 2005</td></tr> </tbody> </table> <p>References: US Department of the Interior, Bureau of Land Management. 2001. Rangeland Health Standards Handbook H-4180-1. https://www.blm.gov/sites/blm.gov/files/uploads/MediaLibraryBLMPolicyh4180-1.pdf.</p>	NESTING/EARLY BROOD REARING (Seasonal Use Period May 1–June 30)				Cover and Food	Perennial grass (and forb) height (includes residual grasses)	Adequate Residual Nesting Cover	Connelly et al. 2000 ⁸ Connelly et al. 2003 ⁹ Hagen et al. 2007 ¹¹ Stiver et al. 2015 ¹³ Hausleitner 2003; Holloran et al. 2005
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	VEG OBJ 3	In all SFA and PHMA, the desired condition is to maintain all lands ecologically capable of producing sagebrush (but no less than 70%) with a minimum of 15% sagebrush canopy cover or as consistent with specific ecological site conditions. The attributes necessary to sustain these habitats are described in Interpreting Indicators of Rangeland Health (BLM Tech Ref 1734-6).	Delete VEG OBJ 3																
Modifying Decisions for Livestock Grazing Commensurate with the Threat Posed																			
	MD LG 15	The BLM will prioritize (1) the review of grazing permits/leases, in particular to determine if modification is necessary prior to renewal, and (2) the processing of grazing permits/leases in Sagebrush Focal Areas (SFA) followed by PHMA outside of the SFA . In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows. Management and conservation action prioritization will occur at the Conservation Area (CA) scale and be based on Greater Sage-Grouse population and habitat trends: Focusing management and conservation actions first in SFA followed by areas of PHMA outside SFA. The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (e.g., fire) and legal obligations.	Generally, the BLM will prioritize (1) the review of grazing permits/leases, in particular to determine if modification is necessary prior to renewal, and (2) the processing of grazing permits/leases <u>based on land health conditions or concerns.</u> If similar issues are found in both PHMA and IHMA, than those in PHMA should be addressed first followed by those in IHMA . In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows. The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (e.g., fire) and legal obligations.																
	MD LG 16	The NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within SFA and PHMA will include specific management thresholds, based on Greater Sage-Grouse Habitat Objectives Table, Land Health Standards (43 CFR 4180.2) and ecological site potential, and one or more defined responses that will allow the authorizing officer to make adjustments to livestock grazing that have already been subjected to NEPA analysis.	Grazing within the CHZ and IHZ will be managed according to the process outlined in the text below. <ul style="list-style-type: none"> a. Incorporate the Greater Sage-Grouse habitat characteristics in Table 3-5 and management considerations into relevant resource management plans as desired conditions recognizing that these conditions may not be achievable (1) due to the existing ecological condition, ecological potential, or existing vegetation; or (2) due to casual events unrelated to existing livestock grazing. b. Prioritize permit renewal and the land health assessments outlined in (iii)(c) in allotments with declining Greater Sage-Grouse populations. c. Conduct fine- and site-scale habitat assessments and, where appropriate, a determination of factors causing any failure to achieve the habitat characteristics in Tables 3-5. The assessment(s) shall be conducted at a resolution sufficient to document the habitat condition and will include local spatial and inter-annual variability. Any determination relative to the habitat characteristics (Tables 3-5) shall be based upon existing ecological condition, ecological potential, and existing vegetation information to ensure the assessment recognizes whether or not these habitat characteristics are achievable. d. The assessment will rely on published characteristics of Greater Sage-Grouse habitat and the Ecological Site Descriptions, and Tables 3-5, and where available and applicable, rangeland health determinations made in accordance with 43 CFR 4180.2(c). 																

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			<p>e. After conducting the assessment in (iii)(c), if the current grazing system achieves the habitat characteristics (Tables 3-5), absent substantial and compelling information no further grazing management changes are necessary.</p> <p>f. If the process and conditions outlined in (iii)(c) demonstrate that livestock grazing is limiting achievement of the habitat characteristics (Tables 3-5), renewed permits will include measures, including but not limited to the actions outlined in Appendix C, Grazing Section of BMPs to achieve desired habitat conditions. These measures must be tailored to address the specific management issues.</p> <p>g. Adaptive management changes related to existing grazing permits should only be undertaken where improper grazing is determined to be the casual factor in not meeting habitat characteristics, specific to site capability, based upon monitoring over with appropriate spatial variability.</p> <p>h. Where management changes are needed and necessary pursuant to (f), implement management actions that are narrowly tailored to address the specific habitat objective applied at the allotment and/or activity plan level, including but not limited to the actions outlined in Appendix C, Grazing Section of BMPs. (The Governor's Plan is attached as Appendix I for references to this section.)</p>
	MD LG 17	Allotments within SFA, followed by those within PHMA, and focusing on those containing riparian areas, including wet meadows, will be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks can include monitoring for actual use, utilization, and use supervision. Management and conservation action prioritization will occur at the Conservation Area (CA) scale and be based on Greater Sage-Grouse population and habitat trends: Focusing management and conservation actions first in SFA followed by areas of PHMA outside SFA.	Allotments within PHMA, and focusing on those with land health concerns, especially those containing riparian areas, including wet meadows, will be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks can include monitoring for actual use, utilization, and use supervision.
	MD WHB 2	Complete rangeland health assessments for HMAs containing Greater Sage-Grouse habitat using an interdisciplinary team of specialists (e.g. range, wildlife, riparian). The priorities for conducting assessments are 1) HMAs Containing SFA ; 2) HMAs containing PHMA; 3) HMAs containing IHMA; 4) HMAs containing GHMA; 5) HMAs containing sagebrush habitat outside of PHMA, IHMA, and GHMA mapped habitat; 6) HMAs without Greater Sage-Grouse Habitat.	Complete rangeland health assessments for HMAs containing Greater Sage-Grouse habitat using an interdisciplinary team of specialists (e.g. range, wildlife, and riparian). The priority for conducting assessments is HMAs with known land health issues and where local populations of Greater Sage-Grouse are in decline. When similar issues are found in multiple HMAs, then the priority should be 1) HMAs containing PHMA; 2) HMAs containing IHMA; 3) HMAs containing GHMA; 4) HMAs containing Greater Sage-Grouse habitat outside of PHMA, IHMA, and GHMA mapped habitat; 5) HMAs without Greater Sage-Grouse Habitat.
Modifying the Mitigation Strategy to Align with the State Mitigation Strategy			
	MD MT 3	In all Greater Sage-Grouse habitat , in undertaking BLM management actions, and, consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation (Appendix E, Table E-1), the BLM will require and ensure mitigation that provides a net conservation gain to the species including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions.	In PHMA and IHMA , in undertaking BLM management actions, and, consistent with valid existing right and applicable law, in authorizing third-party actions that result in habitat loss and degradation (Appendix E, Table E-1), the BLM will require and ensure mitigation that provides no net loss to the species including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. In GHMA, proponents will be required to avoid and minimize impacts to the extent practicable.
	MD SSS 30	<p>The following Anthropogenic Disturbance Development Criteria must be met in the screening and assessment process for proposals in PHMA and IHMA to discourage additional disturbance in PHMA and IHMA (as described in MD LR 2 and MD RE 1; applies to Idaho only):</p> <ol style="list-style-type: none"> Through coordination with the USFWS and State of Idaho (as described in MD CC 1), it is determined that the project cannot be achieved, technically or economically, outside of this management area; and The project siting and/or design should best reduce cumulative impacts and/or impacts on Greater Sage-Grouse and other high value natural, cultural, or societal resources; this may include collocation within the footprint for existing infrastructure, to the extent practicable; and The project results in a net conservation gain to Greater Sage-Grouse Key habitat or with beneficial mitigation actions reduces habitat fragmentation or other threats within the Conservation Area; and The project design mitigates unavoidable impacts through appropriate compensatory mitigation; and Development will be implemented adhering to the RDFs described in Appendix C. The project will not exceed the disturbance cap (MD SSS 27). In Montana, the BLM will apply the project/action screen and mitigation process (Appendix J) 	<p>The following Anthropogenic Disturbance Development Criteria must be met in the screening and assessment process for proposals in PHMA and IHMA to discourage additional disturbance in PHMA and IHMA (as described in MD LR 2 and MD RE 1; applies to Idaho only):</p> <ol style="list-style-type: none"> Through coordination with the State of Idaho (as described in MD CC 1), it is determined that the project cannot be achieved, technically or economically, outside of this management area; and The project siting and/or design should best reduce cumulative impacts and/or impacts on Greater Sage-Grouse and other high value natural, cultural, or societal resources; this may include collocation within the footprint for existing infrastructure, to the extent practicable; and The project results in no net loss to Greater Sage-Grouse key habitat or with beneficial mitigation actions reduces habitat fragmentation or other threats within the Conservation Area; and The project design mitigates unavoidable impacts through appropriate compensatory mitigation; and Development will be implemented adhering to the RDFs described in Appendix C. The project will not exceed the disturbance cap (MD SSS 27).

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	MD LR 14	<p>Lands classified as PHMA, IHMA, and GHMA for Greater Sage-Grouse will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands, including land exchanges, will provide a net conservation gain to the Greater Sage-Grouse or (2) the agency can demonstrate that the disposal, including land exchanges, of the lands will have no direct or indirect adverse impact on conservation of the Greater Sage-Grouse. Land tenure adjustments will be subject to the following disposal, exchange, and acquisition criteria, which include retaining lands with Greater Sage-Grouse habitat. Retention of areas with Greater Sage-Grouse will reduce the likelihood of habitat conversion to agriculture, urbanization, or other uses that will remove sagebrush habitat and potentially impact sensitive plants.</p> <p>Criteria:</p> <ol style="list-style-type: none"> Acquire habitat within PHMA and IHMA, when possible (i.e. willing landowner), and retain ownership of habitat within all Areas, except if disposal will allow for additional or more contiguous federal ownership patterns. Lands within PHMA, IHMA and GHMA will be retained unless disposal of those lands will increase the extent or provide for connectivity of PHMA, IHMA or GHMA. Evaluate potential land exchanges containing historically low-quality Greater Sage-Grouse habitat that may be too costly to restore in exchange for lands of higher quality habitat, lands that connect seasonal Greater Sage-Grouse habitats or lands providing for threatened and endangered species. These potential exchanges should lead to an increase in the extent or continuity of or provide for improved connectivity of PHMA. Higher priority will be given to exchanges for those in-tact areas of sagebrush that will contribute to the expansion of sagebrush areas within PHMA currently in public ownership. Lower priority will be given to other lands that will promote enhancement in the PHMA and IHMA (i.e., areas with fragmented or less in-tact sagebrush). <p>Identify lands for acquisition that increase the extent of or provide for connectivity of PHMA.</p>	<p>Lands classified as PHMA, IHMA, and GHMA for Greater Sage-Grouse will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands, including land exchanges, will provide no net loss to the Greater Sage-Grouse or (2) the agency can demonstrate that the disposal, including land exchanges, of the lands will have no direct or indirect adverse impact on conservation of the Greater Sage-Grouse. Land tenure adjustments will be subject to the following disposal, exchange, and acquisition criteria, which include retaining lands with Greater Sage-Grouse habitat. Retention of areas with Greater Sage-Grouse will reduce the likelihood of habitat conversion to agriculture, urbanization, or other uses that will remove sagebrush habitat and potentially impact sensitive plants.</p> <p>Criteria:</p> <ol style="list-style-type: none"> Lands within PHMA, IHMA, and GHMA will be retained unless disposal of those lands will increase the extent or provide for connectivity of PHMA, IHMA, or GHMA. Evaluate potential land exchanges containing historically low-quality Greater Sage-Grouse habitat that may be too costly to restore in exchange for lands of higher-quality habitat, lands that connect seasonal Greater Sage-Grouse habitats, or lands providing for threatened and endangered species. These potential exchanges should lead to an increase in the extent or continuity of or provide for improved connectivity of PHMA. Higher priority will be given to exchanges for those intact areas of sagebrush that will contribute to the expansion of sagebrush areas within PHMA currently in public ownership. Lower priority will be given to other lands that will promote enhancement in the IHMA and GHMA (i.e., areas with fragmented or less intact sagebrush). <p>Identify lands for acquisition that increase the extent of or provide for connectivity of PHMA.</p>
	OBJ MR 2	<p>Where a proposed fluid mineral development project on an existing lease can adversely affect Greater Sage-Grouse populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, minimize and apply compensatory mitigation to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an APD or Geothermal Drilling Permit (GDP) for the lease to avoid, minimize, and apply compensatory mitigation to impacts on Greater Sage-Grouse or its habitat and will ensure that the best information about the Greater Sage-Grouse and its habitat informs and helps to guide development of such Federal leases.</p>	<p>Where a proposed fluid mineral development project on an existing lease can adversely affect Greater Sage-Grouse populations or habitat in PHMA and IHMA, the BLM will work with the lessees, operators, or other project proponents to avoid and minimize impacts and to compensate for unavoidable impacts to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an APD or Geothermal Drilling Permit (GDP) for the lease to apply the mitigation hierarchy to impacts on Greater Sage-Grouse or its habitat and will ensure that the best information about the Greater Sage-Grouse and its habitat informs and helps to guide development of such federal leases.</p>
	MD REC 2	<p>In PHMA and IHMA, do not construct new recreation facilities (e.g., campgrounds, trails, trailheads, staging areas) unless the development will have a net conservation gain to Greater Sage-Grouse habitat (such as concentrating recreation, diverting use away from critical areas, etc.), or unless the development is required for visitor health and safety or resource protection.</p>	<p>In PHMA and IHMA, do not construct new recreation facilities (campgrounds, parking lots, trailheads, and staging areas) larger than 0.25 acres and subject to appropriate buffers and RDFs and appropriate mitigation. Locate and design facilities to avoid or minimize impacts on Greater Sage-Grouse habitat. New trails in PHMA and IHMA should be designed to avoid or minimize impacts on Greater Sage-Grouse habitat. New trails would not be subject to buffers but may be subject to timing restrictions to avoid impacts on Greater Sage-Grouse.</p>
Modifying Adaptive Management Strategy			
	MD-SSS 15	<p>Idaho: The hard and soft trigger data will be analyzed as soon as it becomes available after the signing of the ROD, and twice each year thereafter the applicable monitoring information will be reviewed to determine if any adaptive management triggers have been met.</p>	<p>The data from the lek counts and the key habitat map update will be reviewed annually to determine if any hard or soft adaptive management triggers have been met.</p>
	MD SSS 20	<p>Population Soft Triggers are defined as:</p> <ul style="list-style-type: none"> A 10 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within PHMA within a Conservation Area over the same 3-year period; or A 10 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within IHMA 	<p>Population soft triggers are defined as:</p> <ul style="list-style-type: none"> A 10 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within PHMA within a Conservation Area over the same 3-year period; or A 10 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within IHMA

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		within a Conservation Area over the same 3-year period.	within a Conservation Area over the same 3-year period. <ul style="list-style-type: none"> <u>Significance for soft triggers is defined by the 80 percent confidence interval around the current 3-year finite rate of change. If the 80 percent confidence interval is less than, and does not include 1.0, then the finite rate of change is considered significant. The finite rate of change and variance will be calculated following Garton et al. (2011).</u>
	MD SSS 24	Remove any adaptive management response when the habitat or maximum male population count (i.e., 3-year average) returns to or exceeds the 2011 baseline levels within the associated Conservation Area in accordance with the Adaptive Management Strategy (Appendix E). In such a case, changes in management allocations resulting from a tripped trigger will revert back to the original allocation.	Remove the automatic hard trigger adaptive management response when the habitat or maximum male population count (i.e., 3-year average) returns to or exceeds the 2011 baseline levels within the associated Conservation Area in accordance with the Adaptive Management Strategy (Appendix E). In such a case, changes in management allocations resulting from a tripped trigger will revert back to the original allocation (MD SSS 22).
Modifying Appendices			
	Appendix A Maps	All maps remain as they were printed in 2015.	Update all maps to reflect the following changes: <ul style="list-style-type: none"> Update to display only Idaho Remove SFA Update PHMA and IHMA boundaries to reflect the change of the Brown's Creek area from PHMA to IHMA Update PHMA, IHMA, and GHMA boundaries to reflect corrections to administrative errors Update PHMA and IHMA boundaries to reflect the change of the Brown's Creek area from PHMA BSU to IHMA BSU Delete Figure 2-11b, as it only applies to Montana
	Appendix B	B. Buffers Applying Lek Buffer-Distances When Approving Actions <i>• Buffer Distances and Evaluation of Impacts to Leaks</i> Evaluate impacts to leks from actions requiring NEPA analysis. In addition to any other relevant information determined to be appropriate (e.g. State wildlife agency plans), the BLM will assess and address impacts from the following activities using the lek buffer-distances as identified in the USGS Report <i>Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review</i> (Open File Report 2014-1239). The BLM will apply the lek buffer-distances specified as the lower end of the interpreted range in the report unless justifiable departures are determined to be appropriate (see below). The lower end of the interpreted range of the lek buffer-distances is as follows: <ul style="list-style-type: none"> o linear features (roads) within 3.1 miles of leks o infrastructure related to energy development within 3.1 miles of leks. o tall structures (e.g., communication or transmission towers, transmission lines) within 2 miles of leks. o low structures (e.g., fences, rangeland structures) within 1.2 miles of leks. o surface disturbance (continuing human activities that alter or remove the natural vegetation) within 3.1 miles of leks. o noise and related disruptive activities including those that do not result in habitat loss (e.g., motorized recreational events) at least 0.25 miles from leks. Justifiable departures to decrease or increase from these distances, based on local data, best available science, landscape features, and other existing protections (e.g., land use allocations, state regulations) may be appropriate for determining activity impacts. The USGS report recognized “that because of variation in populations, habitats, development patterns, social context, and other factors, for a particular disturbance type, there is no single distance that is an appropriate buffer for all populations and habitats across the sage-grouse range”. The USGS report also states that “various protection measures have been developed and implemented... [which have] the ability (alone or in concert with others) to protect important habitats, sustain populations, and support multiple-use demands for public lands”. All variations in lek buffer-distances	<i>Distance Estimates for Greater Sage-Grouse – A Review</i> (Open File Report 2014-1239). In PHMA: The BLM will apply the lek buffer-distances specified as the lower end of the interpreted range in the report unless justifiable departures are determined to be appropriate (see below). The lower end of the interpreted range of the lek buffer-distances is as follows: <ul style="list-style-type: none"> o linear features (roads) within 3.1 miles of leks o infrastructure related to energy development within 3.1 miles of leks o tall structures (e.g., communication or transmission towers, transmission lines) within 2 miles of leks o low structures (e.g., fences and rangeland structures) within 1.2 miles of leks o surface disturbance (continuing human activities that alter or remove the natural vegetation) within 3.1 miles of leks o noise and related disruptive activities including those that do not result in habitat loss (e.g., motorized recreational events) at least 0.25 miles from leks <u>In IHMA: The BLM will apply the lek buffer-distances specified as the USGS Literature Minimums in the report unless justifiable departures are determined to be appropriate (see below). The USGS Literature Minimums of the lek buffer-distances are as follows:</u> <ul style="list-style-type: none"> <u>o linear features (roads) within 0.25 miles of leks</u> <u>o infrastructure related to energy development within 2 miles of leks</u> <u>o tall structures (e.g., communication or transmission towers, transmission lines) within 0.6 miles of leks</u> <u>o low structures (e.g., fences and rangeland structures) within 0.12 miles of leks</u> <u>o surface disturbance (continuing human activities that alter or remove the natural vegetation) within 2 miles of leks</u> <u>o noise and related disruptive activities including those that do not result in habitat loss (e.g., motorized recreational events) at least 0.12 miles from leks</u>

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		<p>will require appropriate analysis and disclosure as part of activity authorization. In determining lek locations, the BLM will use the most recent active or occupied lek data available from the state wildlife agency.</p> <p><i>For Actions in GHMA</i> The BLM will apply the lek buffer-distances identified above as required conservation measures to fully address the impacts to leks as identified in the NEPA analysis. Impacts should first be avoided by locating the action outside of the applicable lek buffer – distance(s) identified above. The BLM may approve actions in GHMA that are within the applicable lek buffer distance identified above only if: o Impacts should first be avoided by locating the action outside of the applicable lek buffer-distance(s) identified above. o If it is not possible to relocate the project outside of the applicable lek buffer-distance(s) identified above, the BLM may approve the project only if: – Based on best available science, landscape features, and other existing protections, (e.g., land use allocations, state regulations), the BLM determines that a lek buffer-distance other than the applicable distance identified above offers the same or a greater level of protection to Greater Sage-Grouse and its habitat, including conservation of seasonal habitat outside of the analyzed buffer area; or – The BLM determines that impacts to Greater Sage-Grouse and its habitat are minimized such that the project will cause minor or no new disturbance (ex. co-location with existing authorizations); and – Any residual impacts within the lek buffer-distances are addressed through compensatory mitigation measures sufficient to ensure a net conservation gain, as outlined in the Mitigation Strategy (Appendix X).</p> <p>• <i>For Actions in PHMA and IHMA</i> The BLM will apply the lek buffer-distances identified above as required conservation measures to fully address the impacts to leks as identified in the NEPA analysis. Impacts should be avoided by locating the action outside of the applicable lek buffer-distance(s) identified above. The BLM may approve actions in PHMA and IMHA that are within the applicable lek buffer distance identified above only if: o The BLM, with input from the state fish and wildlife agency, determines, based on best available science, landscape features, and other existing protections, that a buffer distance other than the distance identified above offers the same or greater level of protection to Greater Sage-Grouse and its habitat, including conservation of seasonal habitat outside of the analyzed buffer area. • Range improvements which do not impact Greater Sage-Grouse, or, range improvements which provide a conservation benefit to Greater Sage-Grouse such as fences for protecting important seasonal habitats, meet the lek buffer requirement. • The BLM will explain its justification for determining the approved buffer-distances meet these conditions in its project decision.</p>	<p><u>The buffers do not apply to vegetation treatments specifically designed to improve or protect Greater Sage-Grouse habitat.</u></p> <p><u>Buffers are not required in GHMA.</u></p> <p>Justifiable departures to decrease or increase from these distances, based on local data, best available science, landscape features, and other existing protections (e.g., land use allocations and state regulations) may be appropriate for determining activity impacts. The USGS report recognized “that because of variation in populations, habitats, development patterns, social context, and other factors, for a particular disturbance type, there is no single distance that is an appropriate buffer for all populations and habitats across the sage-grouse range.” The USGS report also states that “various protection measures have been developed and implemented... [which have] the ability (alone or in concert with others) to protect important habitats, sustain populations, and support multiple-use demands for public lands.” All variations in lek buffer-distances will require appropriate analysis and disclosure as part of activity authorization. In determining lek locations, the BLM will use the most recent active or occupied lek data available from the state wildlife agency.</p> <p>• <i>For Actions in PHMA and IHMA</i> The BLM will apply the lek buffer-distances identified above as required conservation measures to fully address the impacts on leks as identified in the NEPA analysis. Impacts should be avoided by locating the action outside of the applicable lek buffer-distance(s) identified above. The BLM may approve actions in PHMA and IMHA that are within the applicable lek buffer-distance identified above only if: o The BLM, with input from the state fish and wildlife agency, determines, based on best available science, landscape features, and other existing protections, that a buffer-distance other than the distance identified above offers the same or greater level of protection to Greater Sage-Grouse and its habitat, including conservation of seasonal habitat outside of the analyzed buffer area. • Range improvements that do not impact Greater Sage-Grouse, or, range improvements that provide a conservation benefit to Greater Sage-Grouse, such as fences for protecting important seasonal habitats, meet the lek buffer requirement. • The BLM will explain its justification for determining the approved buffer distances meet these conditions in its project decision.</p>
	Appendix C	<p>C. Required Design Features Required Design Features (RDFs) are required for certain activities in all Greater Sage-Grouse habitat. RDFs establish the minimum specifications for certain activities to help mitigate adverse impacts. However, the applicability and overall effectiveness of each RDF cannot be fully assessed until the project level when the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects (e.g., a resource is not present on a given site) and/or may require slight variations (e.g., a larger or smaller protective area). RDFs are continuously improving as new science and technology become available and therefore are subject to change. All variations in RDFs would require that at least one of the following be demonstrated in the NEPA analysis associated with the project/activity:</p> <ul style="list-style-type: none"> A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased 	<p>C. Required Design Features <u>Required design features (RDFs) are a list of best management practices that are intended to avoid and minimize impacts on Greater Sage-Grouse or Greater Sage-Grouse habitat. When the RDFs are applicable to a given project in PHMA and IHMA, they are required unless an alternate action is implemented that will provide equal or greater protection. The RDFs are considered best management practices that may be considered and applied in GHMA as practicable.</u> Because of site-specific circumstances, some RDFs may not apply to some projects (e.g., a resource is not present on a given site) and/or may require slight variations (e.g., a larger or smaller protective area). RDFs are continuously improving as new science and technology become available and therefore are subject to change. All variations in RDFs would require that at least one of the following be demonstrated in the NEPA analysis associated with the project/activity:</p> <ul style="list-style-type: none"> A specific RDF is documented to not be applicable to the site-specific conditions of the

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		<p>costs, do not necessarily require that an RDF be varied or rendered inapplicable;</p> <ul style="list-style-type: none"> • An alternative RDF, a state-implemented conservation measure or plan-level protection is determined to provide equal or better protection for Greater Sage-Grouse or its habitat. • A specific RDF will provide no additional protection to Greater Sage-Grouse or its habitat. <p>The following required design features (RDFs) are included for consideration and use based upon review of current science and effects analysis (circa 2014) (Table B-1). These may be reviewed during project evaluation and updated through plan maintenance as new information and updated scientific findings become available. The table is organized by program area grouping the RDFs most relevant to that program. All relevant RDFs, regardless of which program they are grouped under, should be considered during project evaluation and applicable RDFs should be applied during implementation. The following measures would be applied as RDFs for all solid minerals. They would also apply to locatable minerals consistent with applicable law. In some cases the RDFs may not all be appropriate based on local conditions and would be assessed in the appropriate site specific NEPA analysis, these all should be considered and where determined to be beneficial to achieving Greater Sage-Grouse habitat objectives included as part of the site specific project. In other cases additional project design criteria or best management practices could be incorporated into project implementation to address site specific concerns not fully addressed by the RDFs described here.</p> <p>General</p> <ol style="list-style-type: none"> 1. Solicit and consider expertise and ideas from local landowners, working groups, and other federal, state, county, and private organizations during development of projects. 2. No repeated or sustained behavioral disturbance (e.g., visual, noise over 10 dbA at lek, etc.) to lekking birds from 6:00 pm to 9:00 am within 2 miles (3.2 km) of leks during the lekking season. 3. Avoid mechanized anthropogenic disturbance, in nesting habitat during the nesting season when implementing: 1) fuels/vegetation/habitat restoration management projects, 2) infrastructure construction or maintenance, 3) geophysical exploration activities; 4) organized motorized recreational events. 4. Avoid mechanized anthropogenic disturbance during the winter, in wintering areas when implementing: 1) fuels/vegetation/habitat restoration management projects, 2) infrastructure construction or maintenance, 3) geophysical exploration activities; 4) organized motorized recreational events. <p>Wildfire Suppression</p> <ol style="list-style-type: none"> 5. Compile district-level information into state-wide Greater Sage-Grouse tool boxes. Tool boxes will contain maps, listing of resource advisors, contact information, local guidance, and other relevant information for each district, which will be aggregated into a state-wide document. 6. Provide localized maps to dispatch offices and extended attack incident commanders for use in prioritizing wildfire suppression resources and designing suppression tactics. The Fire Planning and Fuels Management Division (FA-600) hosts a webpage containing up-to-date maps, instruction memoranda, conservation measures, BMPs, and spatial data specific to fire operations and fuels management/Greater Sage-Grouse interactions. These resources can be accessed at: http://web.blm.gov/internal/fire/fpfm/sg/index.html. <p>Additional BLM Greater Sage-Grouse information can be found at: http://www.blm.gov/wo/st/en/prog/more/fish_wildlife_and/sage-grouse-conservation.html.</p> <ol style="list-style-type: none"> 7. Assign a resource advisor with Greater Sage-Grouse expertise, or who has access to Greater Sage-Grouse expertise, to all extended attack fires in or near Greater Sage-Grouse habitat areas. Prior to the fire season, provide training to Greater Sage-Grouse resource advisors on wildfire suppression organization, objectives, tactics, and procedures to develop a cadre of qualified individuals. Involve state wildlife agency expertise in fire operations through: <ul style="list-style-type: none"> • instructing resource advisors during preseason trainings; 	<p>project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.</p> <ul style="list-style-type: none"> • An alternative RDF, a state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for Greater Sage-Grouse or its habitat. • A specific RDF will provide no additional protection to Greater Sage-Grouse or its habitat. <p>The following RDFs are included for consideration and use based upon review of current science and effects analysis (circa 2014; Table B-1). These may be reviewed during project evaluation and updated through plan maintenance as new information and updated scientific findings become available. The table is organized by program area grouping the RDFs most relevant to that program. All relevant RDFs, regardless of which program they are grouped under, should be considered during project evaluation, and applicable RDFs should be applied during implementation. The following measures would be applied as RDFs for all solid minerals. They would also apply to locatable minerals consistent with applicable law. In some cases, the RDFs may not all be appropriate based on local conditions and would be assessed in the appropriate site-specific NEPA analysis; these all should be considered and where determined to be beneficial to achieving Greater Sage-Grouse habitat objectives included as part of the site-specific project. In other cases, additional project design criteria or best management practices could be incorporated into project implementation to address site-specific concerns not fully addressed by the RDFs described here.</p> <p align="center">Required Design Features</p> <p>General (applicable to all projects)</p> <p>Seasonal Restrictions</p> <ol style="list-style-type: none"> 1. Solicit and consider expertise and ideas from local landowners, working groups, and other federal, state, county, and private organizations during development of projects 2. No repeated or sustained behavioral disturbance (e.g., visual, noise over 10 dbA at lek, etc.) to lekking birds from 6:00 pm to 9:00 am within 2 miles (3.2 km) of leks during the lekking season 3. Avoid mechanized anthropogenic disturbance, in nesting habitat during the nesting season, and in wintering habitat during the winter season when implementing: 1) fuels/vegetation/habitat restoration management projects, 2) infrastructure construction or maintenance, 3) geophysical exploration activities; 4) organized motorized recreational events. <ul style="list-style-type: none"> • Routine road blading, where no water turnouts or culverts are cleaned, repaired, or replaced and no road upgrades occur, is not included in this restriction. • Emergency actions to protect life or property are excluded from these restrictions. • Fuels and vegetation treatments specifically designed to improve or protect Greater Sage-Grouse habitat are subject to this restriction as practicable; however, restoring and improving Greater Sage-Grouse habitat is a high priority of this plan. <p>General infrastructure development activities</p> <ol style="list-style-type: none"> 4. Minimize cross-country vehicle travel during all types of activities in Greater Sage-Grouse habitat. 5. Power-wash all vehicles and equipment involved in off-road activities (including firefighting vehicles, construction equipment, seeding equipment, etc.) prior to entering the area, to minimize the introduction of undesirable and/or invasive plant species. 6. Above-ground disturbance areas would be seeded with perennial vegetation as per vegetation management. 7. Where practicable, place infrastructure in already disturbed locations where the habitat has not been fully restored.

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		<ul style="list-style-type: none"> • qualification as resource advisors; • coordination with resource advisors during fire incidents; • contributing to incident planning with information such as habitat features or other key data useful in fire decision making <p>8. At the onset of an emerging wildland fire the Agency Administrators and Fire Management Officers will engage a local Resource Advisor to assess Greater Sage-Grouse habitat that may be affected by the fire or suppression activities.</p> <p>9. If complexity of the wildland fire warrants the activation of an Incident Management Team, locally refined information regarding important Greater Sage-Grouse habitat will be relayed during in brief and continually throughout the incident.</p> <p>10. On critical fire weather days, pre-position additional fire suppression resources to optimize a quick and efficient response in Greater Sage-Grouse habitat areas.</p> <p>11. As appropriate, utilize existing fuel breaks, such as roads or discrete changes in fuel type, as control lines in order to minimize fire spread.</p> <p>12. During periods of multiple fires, ensure line officers are involved in setting priorities.</p> <p>13. To the extent possible, locate wildfire suppression facilities (i.e., base camps, spike camps, drop points, staging areas, heli-bases, etc.) in areas where physical disturbance to Greater Sage-Grouse habitat can be minimized. These include disturbed areas, grasslands, near roads/trails or in other areas where there is existing disturbance or minimal sagebrush cover.</p> <p>14. Power-wash all firefighting vehicles, to the extent possible, including engines, water tenders, personnel vehicles, and all-terrain vehicles (ATV) prior to deploying in or near Greater Sage-Grouse habitat areas to minimize noxious weed spread.</p> <p>15. Minimize cross-country vehicle travel during fire operations in Greater Sage-Grouse habitat.</p> <p>16. Minimize burnout operations in key Greater Sage-Grouse habitat areas by constructing direct fireline whenever safe and practical to do so.</p> <p>17. Utilize retardant, mechanized equipment, and other available resources to minimize burned acreage during initial attack.</p> <p>18. As safety allows, conduct mop-up where the black adjoins unburned islands, dog legs, or other habitat features to minimize sagebrush loss.</p> <p>19. Adequately document fire operation activities in Greater Sage-Grouse habitat for potential follow-up coordination activities.</p> <p>Fuels Management <i>Unless otherwise specified as part of the land use plan consider the full array of fuels management treatment types (prescribed fire, mechanical, chemical and biological) when implementing the following RDFs.</i></p> <p>20. Where applicable, design fuels treatment objectives to protect existing sagebrush ecosystems, modify fire behavior, restore native plants, and create landscape patterns which most benefit Greater Sage-Grouse habitat.</p> <p>21. Provide training to fuels treatment personnel on Greater Sage-Grouse biology, habitat requirements, and identification of areas utilized locally.</p> <p>22. Use burning prescriptions which minimize undesirable effects on vegetation or soils (e.g., minimize mortality of desirable perennial plant species and reduce risk of annual grass invasion).</p> <p>23. Ensure proposed sagebrush treatments are planned with full interdisciplinary input pursuant to NEPA and coordination with state fish and wildlife agencies, and that treatment acreage is conservative in the context of surrounding Greater Sage-Grouse seasonal habitats and landscape.</p> <p>24. Where appropriate, ensure that treatments are configured in a manner that promotes use by Greater Sage-Grouse.</p> <p>25. Where applicable, incorporate roads and natural fuel breaks into fuel break design.</p> <p>26. Power-wash all vehicles and equipment involved in fuels management activities, prior to entering the area, to minimize the introduction of undesirable and/or invasive plant species.</p>	<p>8. Cluster disturbances, operations (fracturing stimulation, liquids gathering, etc.) and facilities as close as possible.</p> <p>9. Collocate linear facilities within 1 mile of existing linear facilities.</p> <p>10. Micro-site linear facilities to reduce impacts on Greater Sage-Grouse habitats.</p> <p>11. Locate staging areas outside PHMA to the extent possible.</p> <p>12. Consider collocating powerlines, flowlines, and pipelines under or immediately adjacent to a road or adjacent to other pipelines first, before considering collocating with other ROWs.</p> <p>13. Restrict the construction of tall facilities and fences to the minimum number and amount needed.</p> <p>14. Construction and development activities should conform to seasonal restrictions.</p> <p>15. Control the spread and effects of nonnative plant species (e.g. by washing vehicles and equipment; Gelbard and Belnap 2003; Bergquist et al. 2007; Evangelista et al. 2011).</p> <p>16. The BLM/Forest Service would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate.</p> <p>17. <u>Design and locate fences to reduce the risk of Greater Sage-Grouse collisions.</u></p> <p>18. As new research is completed, new specific limitations would be coordinated with the IDFG and partners.</p> <p>19. Clean up refuse (Bui et al. 2010).</p> <p>20. <u>Eliminate or minimize corvid subsidies as practicable.</u></p> <p>Roads</p> <p>21. Utilize existing roads, or realignments of existing routes to the extent possible.</p> <p>22. Design roads to an appropriate standard no higher than necessary to accommodate their intended purpose.</p> <p>23. Do not issue ROWs or SUAs to counties on newly constructed energy or mineral development roads, unless for a temporary use consistent with all other terms and conditions included in this document.</p> <p>24. Establish speed limits on BLM and USFS system roads to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.</p> <p>25. Coordinate road construction and use among ROW or SUA holders.</p> <p>26. Construct road crossings at right angles to ephemeral drainages and stream crossings.</p> <p>27. Use dust abatement on roads and pads as necessary.</p> <p>28. Close and reclaim duplicate roads by restoring original landform and establishing desired vegetation.</p> <p>29. Locate roads to avoid priority areas and habitats as described in the Wildfire and Invasive Species Assessments <u>to the extent practicable.</u></p> <p>Reclamation Activities</p> <p>30. Include objectives for ensuring habitat restoration to meet Greater Sage-Grouse habitat needs in reclamation practices/sites (Pyke 2011).</p> <p>31. Address post-reclamation management in the reclamation plan such that goals and objectives are to protect and improve Greater Sage-Grouse habitat needs.</p> <p>32. Maximize the area of interim reclamation on long-term access roads and well pads, including reshaping, topsoiling, and revegetating cut-and-fill slopes.</p> <p>33. Restore disturbed areas at final reclamation to the pre-disturbance landforms and desired plant community.</p> <p>34. Irrigate interim reclamation if necessary for establishing seedlings more quickly.</p> <p>35. Utilize mulching techniques to expedite reclamation and to protect soils.</p>

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		<p>27. Design vegetation treatments in areas of high fire frequency which facilitate firefighter safety, reduce the potential acres burned, and reduce the fire risk to Greater Sage-Grouse habitat. Additionally, develop maps for Greater Sage-Grouse habitat which spatially display existing fuels treatments that can be used to assist suppression activities.</p> <p>28. As funding and logistics permit, restore annual grasslands to a species composition characterized by perennial grasses, forbs, and shrubs or one of that referenced in land use planning documentation.</p> <p>29. Emphasize the use of native plant species, especially those from a warmer area of the species' current range, recognizing that non-native species may be necessary depending on the availability of native seed and prevailing site conditions.</p> <p>30. Remove standing and encroaching trees within at least 110 yards of occupied Greater Sage-Grouse leks and other habitats (e.g., nesting, wintering and brood rearing) to reduce the availability of perch sites for avian predators, as resources permit.</p> <p>31. Protect wildland areas from wildfire originating on private lands, infrastructure corridors, and recreational areas.</p> <p>32. Reduce the risk of vehicle- or human-caused wildfires and the spread of invasive species by installing fuel breaks and/or planting perennial vegetation (e.g., green-strips) paralleling road rights-of-way.</p> <p>33. Strategically place and maintain pre-treated strips/areas (e.g., mowing, herbicide application, etc.) to aid in controlling wildfire, should wildfire occur near PHMA or priority restoration areas (such as where investments in restoration have already been made).</p> <p>34. Design treatments to provide a break in fuel continuity in large, at-risk, expanses of continuous sagebrush. Use local knowledge of fire occurrence, spread patterns, and habitat values at risk to determine the proper placement and size of the fuel break.</p> <p>35. Use existing agreements with local, county, and state road departments to improve and maintain existing fuel breaks during routine road maintenance. Examples include: blading, mowing, disking, grading, and spraying roadside vegetation.</p> <p>36. Form partnerships with linear right-of-way holders to maintain fuel breaks, which reduce fuel continuity and serve to protect at-risk landscapes.</p> <p>37. Use existing NEPA documentation and authorities, where possible, when conducting road right-of-way maintenance. In many instances, existing authorizations for roads or linear rights-of-way contain provisions for maintenance activities that could be implemented and incorporated into a vegetation and habitat protection strategy without requiring additional NEPA analysis. Document this with a Determination of NEPA Adequacy (DNA).</p> <p>38. Enter into agreements with road departments which may help fund the construction and maintenance of fuel breaks adjacent to roads, as funding permits.</p> <p>39. Spatially depict the locations of existing and planned fuel breaks in a landscape fuel break map and label each vegetation polygon for reference. Offices will make these maps available to suppression resources for use in fire operations.</p> <p>Vegetation Treatment</p> <p>40. Utilize available plant species based on their adaptation to the site when developing seed mixes (Lambert 2005; VegSpec).</p> <p>41. Utilizing the warmer component of a species' current range when selecting native species for restoration when available (Kramer and Havens 2009).</p> <p>42. Reduce annual grass densities and competition through herbicide, targeted grazing, tillage, prescribed fire, etc. (Pyke 2011).</p> <p>43. Reduce density and competition of introduced perennial grasses using appropriate techniques to accomplish this reduction (Pellant and Lysne 2005).</p> <p>44. Utilize techniques to introduce desired species to the site such as drill seeding, broadcast seeding followed by a seed coverage technique, such as harrowing, chaining or livestock trampling, and transplanting container or bare-root seedlings.</p>	<p>Specific (Applicable only to certain project types) Wildfire Suppression</p> <p>36. Compile district-level information into statewide Greater Sage-Grouse tool boxes. Tool boxes will contain maps, listing of resource advisors, contact information, local guidance, and other relevant information for each district, which will be aggregated into a statewide document.</p> <p>37. Provide localized maps to dispatch offices and extended attack incident commanders for use in prioritizing wildfire suppression resources and designing suppression tactics. The Fire Planning and Fuels Management Division (FA-600) hosts a webpage containing up-to-date maps, instruction memoranda, conservation measures, BMPs, and spatial data specific to fire operations and fuels management/Greater Sage-Grouse interactions. These resources can be accessed at: http://web.blm.gov/internal/fire/fpfm/sg/index.html. Additional BLM Greater Sage-Grouse information can be found at: http://www.blm.gov/wo/st/en/prog/more/fish_wildlife_and/sage-grouse_conservation.html.</p> <p>38. Assign a resource advisor with Greater Sage-Grouse expertise, or who has access to Greater Sage-Grouse expertise, to all extended attack fires in or near Greater Sage-Grouse habitat areas. Prior to the fire season, provide training to Greater Sage-Grouse resource advisors on wildfire suppression organization, objectives, tactics, and procedures to develop a cadre of qualified individuals. Involve state wildlife agency expertise in fire operations through:</p> <ul style="list-style-type: none"> • instructing resource advisors during preseason trainings • qualification as resource advisors • coordination with resource advisors during fire incidents • contributing to incident planning with information such as habitat features or other key data useful in fire decision making <p>39. At the onset of an emerging wildland fire, the Agency Administrators and Fire Management Officers will engage a local Resource Advisor to assess Greater Sage-Grouse habitat that may be affected by the fire or suppression activities.</p> <p>40. If complexity of the wildland fire warrants the activation of an Incident Management Team, locally refined information regarding important Greater Sage-Grouse habitat will be relayed during in brief and continually throughout the incident.</p> <p>41. On critical fire weather days, pre-position additional fire suppression resources to optimize a quick and efficient response in Greater Sage-Grouse habitat areas.</p> <p>42. As appropriate, utilize existing fuel breaks, such as roads or discrete changes in fuel type, as control lines in order to minimize fire spread.</p> <p>43. During periods of multiple fires, ensure line officers are involved in setting priorities.</p> <p>44. To the extent possible, locate wildfire suppression facilities (i.e., base camps, spike camps, drop points, staging areas, heli-bases, etc.) in areas where physical disturbance to Greater Sage-Grouse habitat can be minimized. These include disturbed areas, grasslands, near roads/trails, or in other areas where there is existing disturbance or minimal sagebrush cover.</p> <p>45. Minimize burnout operations in key Greater Sage-Grouse habitat areas by constructing direct fireline whenever safe and practical to do so.</p> <p>46. Utilize retardant, mechanized equipment, and other available resources to minimize burned acreage during initial attack.</p> <p>47. As safety allows, conduct mop-up where the black adjoins unburned islands, dog legs, or other habitat features to minimize sagebrush loss.</p> <p>48. Adequately document fire operation activities in Greater Sage-Grouse habitat for potential follow-</p>

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		<p>45. Assess existing on-site vegetation to ascertain if enough desirable perennial vegetation exists to consider techniques to increase on-site seed production to facilitate an increase in density of desired species.</p> <p>46. Use site preparation techniques that retain existing desirable vegetation.</p> <p>47. Use "mother plant" techniques or planting of satellite populations of desirable plants to serve as seed sources.</p> <p>48. Utilize post-treatment control of annual grass and other invasive species.</p> <p>49. Utilize new tools and use of new science and research as it becomes available.</p> <p>50. Give higher priority to vegetation rehabilitation or manipulation projects that include:</p> <ul style="list-style-type: none"> • Sites where environmental variables contribute to improved chances for project success (Meinke et al. 2009). • Areas where seasonal habitat is limiting Greater Sage-Grouse distribution and/or abundance (wintering areas, wet meadows and riparian areas, nesting areas, leks, etc.). • Re-establish sagebrush cover in otherwise suitable Greater Sage-Grouse with consideration to local needs and conditions using the general priorities in the following order: <ul style="list-style-type: none"> • Recently burned native areas • Native grassland with suitable forb component • Nonnative grassland with suitable forb component • Recently converted annual grass areas • Native grassland • Nonnative grassland • Where desirable perennial bunchgrasses and/or forbs are deficient in existing sagebrush stands, use appropriate mechanical, aerial or other techniques to re-establish them. Examples include but are not limited to, use of a Lawson aerator with seeding, harrow or chain with seeding, drill seeding, hand planting plugs, aerial seeding or other appropriate technique. • Cooperative efforts that may improve Greater Sage-Grouse habitat quality over multiple ownerships. • Projects that may provide connectivity between suitable habitats or expand existing good quality habitats. • Projects that address conifer encroachment into important Greater Sage-Grouse habitats. In general the priority for treatment is 1) Phase 1 ($\leq 10\%$ conifer cover), 2) Phase 2 (10-30%), and 3) Phase 3 ($>30\%$). • Replacing stands of annual grasses within otherwise good quality habitats with desirable perennial species. Other factors that contribute to the importance of the restoration project in maintaining or improving Greater Sage-Grouse habitat. <p>51. When conducting vegetation treatments in areas inhabited or potentially inhabited by slickspot peppergrass (<i>Lepidium papilliferum</i>) follow the conservation measures in the applicable conservation agreement between Idaho BLM and US Fish and Wildlife Service (most recent version dated September 2014).</p> <p>Lands and Realty</p> <p>52. Where technically and financially feasible, bury distribution powerlines and communication lines within existing disturbance.</p> <p>53. Above-ground disturbance areas would be seeded with perennial vegetation as per vegetation management.</p> <p>54. Place infrastructure in already disturbed locations where the habitat has not been fully restored.</p> <p>55. Cluster disturbances, operations (fracturing stimulation, liquids gathering, etc.) and facilities as close as possible.</p> <p>56. Co-locate linear facilities within one mile of existing linear facilities.</p> <p>57. Micro-site linear facilities to reduce impacts to Greater Sage-Grouse habitats.</p> <p>58. Locate staging areas outside the Priority Habitat Management Areas to the extent possible.</p> <p>59. Consider collocating powerlines, flowlines and pipelines under or immediately adjacent to a road or</p>	<p>up coordination activities.</p> <p>Fuels Management <i>Unless otherwise specified as part of the land use plan, consider the full array of fuels management treatment types (prescribed fire, mechanical, chemical, and biological) when implementing the following RDFs.</i></p> <p>49. Where applicable, design fuels treatment objectives to protect existing sagebrush ecosystems, modify fire behavior, restore native plants, and create landscape patterns that most benefit Greater Sage-Grouse habitat.</p> <p>50. Provide training to fuels treatment personnel on Greater Sage-Grouse biology, habitat requirements, and identification of areas utilized locally.</p> <p>51. Use burning prescriptions that minimize undesirable effects on vegetation or soils (e.g., minimize mortality of desirable perennial plant species and reduce risk of annual grass invasion).</p> <p>52. Ensure proposed sagebrush treatments are planned with full interdisciplinary input pursuant to NEPA and coordination with state fish and wildlife agencies, and that treatment acreage is conservative in the context of surrounding Greater Sage-Grouse seasonal habitats and landscape.</p> <p>53. Where appropriate, ensure that treatments are configured in a manner that promotes use by Greater Sage-Grouse.</p> <p>54. Where applicable, incorporate roads and natural fuel breaks into fuel break design.</p> <p>55. Design vegetation treatments in areas of high fire frequency that facilitate firefighter safety, reduce the potential acres burned, and reduce the fire risk to Greater Sage-Grouse habitat. Additionally, develop maps for Greater Sage-Grouse habitat that spatially display existing fuels treatments that can be used to assist suppression activities.</p> <p>56. As funding and logistics permit, restore annual grasslands to a species composition characterized by perennial grasses, forbs, and shrubs or one of that referenced in land use planning documentation.</p> <p>57. Emphasize the use of native plant species, especially those from a warmer area of the species' current range, recognizing that nonnative species may be necessary depending on the availability of native seed and prevailing site conditions.</p> <p>58. Remove standing and encroaching trees within at least 110 yards of occupied Greater Sage-Grouse leks and other habitats (e.g., nesting, wintering, and brood rearing) to reduce the availability of perch sites for avian predators, as resources permit.</p> <p>59. Protect wildland areas from wildfire originating on private lands, infrastructure corridors, and recreational areas.</p> <p>60. Maximize the benefit and minimize adverse impacts on Greater Sage-Grouse when designing fuel breaks. Additionally, look for ways to minimize costs associated with maintenance and construction of fuel breaks.</p> <ul style="list-style-type: none"> • Reduce the risk of vehicle- or human-caused wildfires and the spread of invasive species by installing fuel breaks and/or planting perennial vegetation (e.g., green-strips) paralleling road rights-of-way. • Use existing agreements with local, county, and state road departments to improve and maintain existing fuel breaks during routine road maintenance. Examples include blading, mowing, disking, grading, and spraying roadside vegetation. • Form partnerships with linear right-of-way holders to maintain fuel breaks, which reduce fuel continuity and serve to protect at-risk landscapes. • Use existing NEPA documentation and authorities, where possible, when conducting road right-of-way maintenance. In many instances, existing authorizations for roads or linear rights-of-way contain provisions for maintenance activities that could be implemented and incorporated into a vegetation and habitat protection strategy without requiring additional

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Detailed Comparison of Alternatives

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		<p>adjacent to other pipelines first, before considering co-locating with other ROW.</p> <p>60. Restrict the construction of tall facilities and fences to the minimum number and amount needed.</p> <p>61. Use free standing structures where possible, to limit the use of guy wires. Where guy wires are necessary and appropriate bird collision diverters would be used, if doing so would not cause a human safety risk.</p> <p>62. Place new utility developments (power lines, pipelines, etc.) and transportation routes in existing utility or transportation corridors.</p> <p>63. Construction and development activities should conform to seasonal restrictions.</p> <p>Fluid Mineral Leasing</p> <p>64. Use directional drilling and/or multi well-pads to reduce surface disturbance.</p> <p>65. Apply a phased development approach with concurrent reclamation.</p> <p>66. Place liquid gathering facilities outside of PHMAs. Have no tanks at well locations within PHMAs to minimize truck traffic and perching and nesting sites for ravens and raptors.</p> <p>67. Use remote monitoring techniques for production facilities and develop a plan to reduce the frequency of vehicle use (Lyon and Anderson 2003).</p> <p>68. Site and/or minimize linear ROWs or SUAs to reduce disturbance to sagebrush habitats.</p> <p>69. Design or site permanent structures which create movement (e.g. pump jack) to minimize impacts to Greater Sage-Grouse.</p> <p>70. Equip tanks and other above-ground facilities with structures or devices that discourage nesting of raptors and corvids.</p> <p>71. Control the spread and effects of non-native plant species (Gelbard and Belnap 2003, Bergquist et al. 2007, Evangelista et al. 2011). (E.g. by washing vehicles and equipment.)</p> <p>72. Restrict pit and impoundment construction to reduce or eliminate threats from West Nile virus (Doherty 2007).</p> <p>73. Remove or re-inject produced water to reduce habitat for mosquitoes that vector West Nile virus. If surface disposal of produced water continues, use the following steps for reservoir design to limit favorable mosquito habitat:</p> <ul style="list-style-type: none"> • Overbuild size of ponds for muddy and non-vegetated shorelines. • Build steep shorelines to decrease vegetation and increase wave actions. • Avoid flooding terrestrial vegetation in flat terrain or low lying areas. • Construct dams or impoundments that restrict down slope seepage or overflow. • Line the channel where discharge water flows into the pond with crushed rock. • Construct spillway with steep sides and line it with crushed rock. • Treat waters with larvicides to reduce mosquito production where water occurs on the surface <p>74. Require noise shields when drilling during the lek, nesting, brood-rearing, or wintering season.</p> <p>75. The BLM/Forest Service would work with proponents to limit project related noise where it would be expected to reduce functionality of habitats in Priority and Important Habitat Management Areas.</p> <p>76. The BLM/Forest Service would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate.</p> <p>77. Limit noise sources that would be expected to negatively impact populations in Priority and Important Habitat Management Areas and continue to support the establishment of ambient baseline noise levels for occupied leks in Priority Habitat Management Areas.</p> <p>78. As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on Greater Sage-Grouse core population behavioral cycles.</p> <p>79. As new research is completed, new specific limitations would be coordinated with the IDFG and MT FWP and partners.</p> <p>80. Fit transmission towers with anti-perch devices (Lammers and Collopy 2007).</p>	<p>NEPA analysis. Document this with a Determination of NEPA Adequacy (DNA).</p> <ul style="list-style-type: none"> • Enter into agreements with road departments that may help fund the construction and maintenance of fuel breaks adjacent to roads, as funding permits. • Strategically place and maintain pre-treated strips/areas (e.g., mowing, herbicide application, etc.) to aid in controlling wildfire, should wildfire occur near PHMA or priority restoration areas (such as where investments in restoration have already been made). • Design treatments to provide a break in fuel continuity in large, at-risk expanses of continuous sagebrush. Use local knowledge of fire occurrence, spread patterns, and habitat values at risk to determine the proper placement and size of the fuel break. <p>61. Spatially depict the locations of existing and planned fuel breaks in a landscape fuel break map and label each vegetation polygon for reference. Offices will make these maps available to suppression resources for use in fire operations.</p> <p>Vegetation Treatment</p> <p>62. Utilize available plant species based on their adaptation to the site when developing seed mixes (Lambert 2005; VegSpec).</p> <p>63. Consider utilizing the warmer component of a species' current range when selecting native species for restoration when available (Kramer and Havens 2009).</p> <p>64. Reduce annual grass densities and competition through herbicide, targeted grazing, tillage, prescribed fire, etc. (Pyke 2011).</p> <p>65. Reduce density and competition of introduced perennial grasses using appropriate techniques to accomplish this reduction (Pellant and Lysne 2005).</p> <p>66. Utilize effective techniques to introduce desired species to the site based on site-specific conditions (e.g. drill seeding, broadcast seeding followed by a seed coverage technique, such as harrowing, chaining, or incorporation by livestock trampling, and transplanting container or bare-root seedlings).</p> <p>67. Assess existing on-site vegetation to ascertain if enough desirable perennial vegetation exists to consider techniques to increase on-site seed production to facilitate an increase in density of desired species.</p> <p>68. Use site preparation techniques that retain existing desirable vegetation and biological soil crusts to the extent practicable.</p> <p>69. Use "mother plant" techniques or planting of satellite populations of desirable plants to serve as seed sources as appropriate.</p> <p>70. Utilize posttreatment control of annual grass and other invasive species.</p> <p>71. Give higher priority to vegetation rehabilitation or manipulation projects that include:</p> <ul style="list-style-type: none"> • Sites where environmental variables contribute to improved chances for project success (Meinke et al. 2009). • Areas where seasonal habitat is limiting Greater Sage-Grouse distribution and/or abundance (wintering areas, wet meadows and riparian areas, nesting areas, leks, etc.). • Reestablish sagebrush cover in otherwise suitable Greater Sage-Grouse with consideration to local needs and conditions using the general priorities in the following order: <ol style="list-style-type: none"> Recently burned native areas Native grassland with suitable forb component Nonnative grassland with suitable forb component Recently converted annual grass areas Native grassland Nonnative grassland • Where desirable perennial bunchgrasses and/or forbs are deficient in existing sagebrush

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		<p>81. Require Greater Sage-Grouse-safe fences.</p> <p>82. Locate new compressor stations outside Priority Habitat Management Areas and design them to reduce noise that may be directed towards Priority Habitat Management Areas.</p> <p>83. Clean up refuse (Bui et al. 2010).</p> <p>84. Locate man camps outside of priority Greater Sage-Grouse habitats.</p> <p>85. Consider using oak (or other material) mats for drilling activities to reduce vegetation disturbance and for roads between closely spaced wells to reduce soil compaction and maintain soil structure to increase likelihood of vegetation reestablishment following drilling.</p> <p>86. Use only closed-loop systems for drilling operations and no reserve pits.</p> <p>87. Cover (e.g., fine mesh netting or use other effective techniques) all drilling and production pits and tanks regardless of size to reduce Greater Sage-Grouse mortality.</p> <p>Roads</p> <p>88. Utilize existing roads, or realignments of existing routes to the extent possible.</p> <p>89. Design roads to an appropriate standard no higher than necessary to accommodate their intended purpose.</p> <p>90. Do not issue ROWs or SUAs to counties on newly constructed energy or mineral development roads, unless for a temporary use consistent with all other terms and conditions included in this document.</p> <p>91. Establish speed limits on BLM and FS system roads to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.</p> <p>92. Coordinate road construction and use among ROW or SUA holders.</p> <p>93. Construct road crossings at right angles to ephemeral drainages and stream crossings.</p> <p>94. Use dust abatement on roads and pads.</p> <p>95. Close and reclaim duplicate roads by restoring original landform and establishing desired vegetation.</p> <p>Roads Specific to Priority and Important Habitat Management Areas</p> <p>96. Locate roads to avoid priority areas and habitats as described in the Wildfire and Invasive Species Assessments.</p> <p>97. Establish trip restrictions (Lyon and Anderson 2003) or minimization through use of telemetry and remote well control (e.g., Supervisory Control and Data Acquisition).</p> <p>98. Restrict vehicle traffic to only authorized users on newly constructed routes (using signage, gates, etc.)</p> <p>Reclamation Activities</p> <p>99. Include objectives for ensuring habitat restoration to meet Greater Sage-Grouse habitat needs in reclamation practices/sites (Pyke 2011).</p> <p>100. Address post reclamation management in reclamation plan such that goals and objectives are to protect and improve Greater Sage-Grouse habitat needs.</p> <p>101. Maximize the area of interim reclamation on long-term access roads and well pads, including reshaping, topsoiling and revegetating cut-and-fill slopes.</p> <p>102. Restore disturbed areas at final reclamation to the pre-disturbance landforms and desired plant community.</p> <p>103. Irrigate interim reclamation if necessary for establishing seedlings more quickly.</p> <p>104. Utilize mulching techniques to expedite reclamation and to protect soils.</p> <p>Grazing</p> <p>105. Avoid building new wire fences within 2 km of occupied leks (Stevens 2011). If this is not feasible, ensure that high risk segments are marked with collision diverter devices or as latest science indicates.</p> <p>106. Place new, taller structures, including corrals, loading facilities, water storage tanks, windmills, out of line of sight or at least one kilometer (preferably 3 km) from occupied leks, where such structures would increase the risk of avian predation.</p>	<p>stands, use appropriate mechanical, aerial, or other techniques to reestablish them (e.g. a Lawson aerator with seeding, harrow or chain with seeding, drill seeding, hand planting plugs, aerial seeding, or other appropriate techniques).</p> <ul style="list-style-type: none"> • Cooperative efforts that may improve Greater Sage-Grouse habitat quality over multiple ownerships. • Projects that may provide connectivity between suitable habitats or expand existing good quality habitats. • Projects that address conifer encroachment into important Greater Sage-Grouse habitats. In general the priority for treatment is 1) Phase 1 (≤10% conifer cover), 2) Phase 2 (10-30%), and 3) Phase 3 (>30%). • Replacing stands of annual grasses within otherwise good quality habitats with desirable perennial species. Other factors that contribute to the importance of the restoration project in maintaining or improving Greater Sage-Grouse habitat. <p>72. When conducting vegetation treatments in areas inhabited or potentially inhabited by slickspot peppergrass (<i>Lepidium papilliferum</i>), follow the conservation measures in the applicable conservation agreement between Idaho BLM and US Fish and Wildlife Service (most recent version dated September 2014).</p> <p>Lands and Realty</p> <p>73. Where technically and financially feasible, bury distribution powerlines and communication lines within existing disturbance.</p> <p>74. Use free standing structures where possible, to limit the use of guy wires. Where guy wires are necessary and appropriate, bird collision diverters would be used, if doing so would not cause a human safety risk.</p> <p>75. Place new utility developments (power lines, pipelines, etc.) and transportation routes in existing utility or transportation corridors.</p> <p>76. Fit transmission towers with anti-perch devices (Lammers and Collopy 2007).</p> <p>Fluid Mineral Leasing</p> <p>77. Use directional drilling and/or multi well-pads to reduce surface disturbance.</p> <p>78. Apply a phased development approach with concurrent reclamation.</p> <p>79. Place liquid gathering facilities outside of PHMA. Have no tanks at well locations within PHMA to minimize truck traffic and perching and nesting sites for ravens and raptors.</p> <p>80. Use remote monitoring techniques for production facilities and develop a plan to reduce the frequency of vehicle use (Lyon and Anderson 2003).</p> <p>81. Site and/or minimize linear ROWs or SUAs to reduce disturbance to sagebrush habitats.</p> <p>82. Design or site permanent structures that create movement (e.g. pump jack) to minimize impacts on Greater Sage-Grouse.</p> <p>83. Equip tanks and other above-ground facilities with structures or devices that discourage nesting of raptors and corvids.</p> <p>84. Restrict pit and impoundment construction to reduce or eliminate threats from West Nile virus (Doherty 2007).</p> <p>85. Remove or re-inject produced water to reduce habitat for mosquitoes that vector West Nile virus as practicable. If surface disposal of produced water continues, use the following steps for reservoir design to limit favorable mosquito habitat:</p> <ul style="list-style-type: none"> • Overbuild size of ponds for muddy and non-vegetated shorelines. • Build steep shorelines to decrease vegetation and increase wave actions. • Avoid flooding terrestrial vegetation in flat terrain or low-lying areas.

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		<p>107. Utilize temporary fencing (e.g., ESR, drop down fencing) where feasible and appropriate to meet management objectives.</p> <p>108. Fence wetlands (e.g., springs, seeps, wet meadows and/or riparian areas) where appropriate, to maintain or foster progress toward Proper Functioning Condition and to facilitate management of Greater Sage-Grouse habitat objectives. Where constructing fences or exclosures to improve riparian and/or upland management, incorporate fence marking or other BMPs/RDFs as appropriate.</p> <p>109. During lekking periods, as determined locally (approximately March 15-May 1 in lower elevations and March 25-May 15 in higher elevations), livestock trailing will be avoided to the extent possible within 1 km (0.62 mile) of occupied leks between 6:00 p.m. and 9:00 a.m. to avoid disturbance to lekking and roosting Greater Sage-Grouse. Over-nighting, watering and sheep bedding locations on public lands must be at least 1 km from occupied leks during the lekking season to reduce disturbance from sheep, human activity and guard animals.</p> <p>110. Work with permittees in locating sheep over-nighting, watering and sheep bedding locations to minimize impacts to Greater Sage-Grouse seasonal habitats.</p> <p>111. When trailing livestock during the lekking or nesting season, use roads or existing trails, to the extent possible to reduce disturbance to roosting, lekking or nesting Greater Sage-Grouse.</p> <p>112. Design new spring developments in Greater Sage-Grouse habitat to maintain or enhance the free flowing characteristics of springs and wet meadows. Modify developed springs, seeps and associated pipelines to maintain the continuity of the predevelopment riparian area within priority Greater Sage-Grouse habitat where necessary.</p> <p>113. Install ramps in new and existing livestock troughs and open water storage tanks to facilitate the use of and escape from troughs by Greater Sage-Grouse and other wildlife.</p> <p>West Nile Virus</p> <p>114. Construct water return features and maintain functioning float valves to prohibit water from being spilled on the ground surrounding the trough and/or tank and return water to the original water source, to the extent practicable.</p> <p>115. Minimize the construction of new ponds or reservoirs except as needed to meet important resource management and/or restoration objectives.</p> <p>116. Develop and maintain non-pond/reservoir watering facilities, such as troughs and bottomless tanks, to provide livestock water.</p> <p>117. For most spring developments or wells, mosquito breeding habitat usually is not an issue. Flowing cold (less than 50° Fahrenheit) water and steep sides of the stock tanks are not conducive for egg laying or larvae production. If flows are low, the water is warm, or moss production is an issue in the tank, mosquito breeding habitat could exist in the tank.</p> <p>118. Maintenance of healthy wetlands at spring sources helps control mosquitoes and their larvae by providing habitat for natural predators such as birds, dragonflies and amphibians. Protecting the wetland at the spring source with a fence is an option to consider.</p> <p>119. Clean and drain stock tanks before the season starts. If never cleaned or drained, many tanks will fill with silt or debris causing warmer water and heavy vegetation growth conducive to mosquito reproduction.</p> <p>120. Draining tanks after the period of use is completed, particularly in warmer weather, also reduces potential habitat by eliminating stagnant standing water.</p> <p>121. Maintain a properly functioning overflow to prevent water from flowing onto the pad and surrounding area, to eliminate or minimize pooling of water that is attractive to breeding mosquitoes.</p> <p>122. Clean or deepen overflow ponds to maintain colder temperatures to reduce mosquito habitat.</p> <p>123. Install and maintain float valves on stock tank fill pipes to minimize overflow</p> <p>124. Harden stock tank pads to reduce tracks that can potentially hold water where mosquitoes may breed.</p> <p>125. Build ponds with steep shorelines to reduce shallow water (>60 cm) and aquatic vegetation around the perimeter of impoundments to deter colonizing by mosquitos (Knight et al. 2003, cited in NTT report page 61).</p>	<ul style="list-style-type: none"> • Construct dams or impoundments that restrict down slope seepage or overflow. • Line the channel where discharge water flows into the pond with crushed rock. • Construct spillway with steep sides and line it with crushed rock. • Treat waters with larvicides to reduce mosquito production where water occurs on the surface. <p>86. Require noise shields when drilling during the lek, nesting, brood-rearing, or wintering season.</p> <p>87. The BLM/Forest Service would work with proponents to limit project-related noise where it would be expected to reduce functionality of habitats in PHMA and IHMA.</p> <p>88. Limit noise sources that would be expected to negatively impact populations in PHMA and IHMA and continue to support the establishment of ambient baseline noise levels for occupied leks in PHMA.</p> <p>89. As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on Greater Sage-Grouse core population behavioral cycles.</p> <p>90. Locate new compressor stations outside PHMA and design them to reduce noise that may be directed toward PHMA.</p> <p>91. Locate man camps outside of priority Greater Sage-Grouse habitats.</p> <p>92. Consider using oak (or other material) mats for drilling activities to reduce vegetation disturbance and for roads between closely spaced wells to reduce soil compaction and maintain soil structure to increase likelihood of vegetation reestablishment following drilling.</p> <p>93. Use only closed-loop systems for drilling operations and no reserve pits.</p> <p>94. Cover (e.g., fine mesh netting or use other effective techniques) all drilling and production pits and tanks regardless of size to reduce Greater Sage-Grouse mortality.</p> <p>95. Establish trip restrictions (Lyon and Anderson 2003) or minimization through use of telemetry and remote well control (e.g., Supervisory Control and Data Acquisition).</p> <p>96. Restrict vehicle traffic to only authorized users on newly constructed routes (using signage, gates, etc.)</p> <p>Grazing</p> <p>97. Avoid building new wire fences within 2 kilometers of occupied leks (Stevens 2011). If this is not feasible, ensure that high-risk segments are marked with collision diverter devices or as latest science indicates.</p> <p>98. Place new, taller structures, including corrals, loading facilities, water storage tanks, and windmills, out of line of sight or at least 1 kilometer (preferably 3 kilometers) from occupied leks, where such structures would increase the risk of avian predation.</p> <p>99. Utilize temporary fencing (e.g., ESR and drop down fencing) where feasible and appropriate to meet management objectives.</p> <p>100. Fence wetlands (e.g., springs, seeps, wet meadows, and/or riparian areas) where appropriate, to maintain or foster progress toward proper functioning condition and to facilitate management of Greater Sage-Grouse habitat objectives. Where constructing fences or exclosures to improve riparian and/or upland management, incorporate fence marking or other BMPs/RDFs as appropriate.</p> <p>101. During lekking periods, as determined locally (approximately March 15-May 1 in lower elevations and March 25-May 15 in higher elevations), livestock trailing will be avoided to the extent possible within 1 kilometer (0.62 miles) of occupied leks between 6:00 p.m. and 9:00 a.m. to avoid disturbance to lekking and roosting Greater Sage-Grouse. Over-nighting, watering, and sheep bedding locations on public lands must be at least 1 kilometer from occupied leks during the lekking season to reduce disturbance from sheep, human activity, and guard animals. When trailing</p>

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		<p>126. Consider removing and controlling trees and shrubs to reduce shade and wind barriers on pit and reservoir shorelines if not needed for wildlife, fish, or recreational values.</p> <p>127. Impoundments that remain accessible to livestock and wildlife can cause tracking and nutrient enrichment from manure which can create favorable mosquito breeding habitat. Where this is a concern, it may be desirable to fence the reservoir and pipe the water to a tank.</p> <p>128. Construct dams or impoundments that minimize down-slope seepage or overflow. Seepage and overflow results in down-grade accumulation of vegetated shallow water areas that support breeding mosquitoes.</p> <p>129. On ponds and reservoirs with enough depth and volume, introduce native fish species, which feed on mosquito larvae.</p> <p>130. Line the overflow of a dam's spillway with crushed rock and constructing the spillway with steep sides to preclude the accumulation of shallow water and vegetation to reduce mosquito habitat.</p> <p>131. Where an existing reservoir has filled with silt, consider cleaning to reduce shallow water habitat conducive to mosquito reproduction.</p> <p>132. During confirmed West Nile virus outbreaks in Greater Sage-Grouse habitat, consider larvicide applications.</p> <p>Travel Management</p> <p>133. Designate or design routes to direct use away from priority areas identified in Wildfire and Invasive Species Assessments and still provide for high-quality and sustainable travel routes and administrative access, legislatively mandated requirements, and commercial needs</p> <p>Recreation</p> <p>134. Direct use away from Greater Sage-Grouse priority areas as described in the Wildfire and Invasive Species Assessments.</p> <p>135. Eliminate or minimize external food sources for corvids.</p> <p>136. Avoid development of new campgrounds or recreation facilities in nesting habitat.</p>	<p>livestock during the lekking or nesting season, use roads or existing trails to the extent possible.</p> <p>102. Work with permittees in locating sheep over-nighting, watering, and sheep bedding locations to minimize impacts on Greater Sage-Grouse seasonal habitats.</p> <p>103. Design new spring developments in Greater Sage-Grouse habitat to maintain or enhance the free flowing characteristics of springs and wet meadows. Modify developed springs, seeps, and associated pipelines to maintain the continuity of the predevelopment riparian area within priority Greater Sage-Grouse habitat where practicable and appropriate.</p> <p>104. Install ramps in new and existing livestock troughs and open water storage tanks to facilitate the use of and escape from troughs by Greater Sage-Grouse and other wildlife.</p> <p>West Nile Virus</p> <p>105. Minimize the construction of new ponds or reservoirs except as needed to meet important resource management and/or restoration objectives.</p> <p>106. Maintenance of healthy wetlands at spring sources helps control mosquitoes and their larvae by providing habitat for natural predators such as birds, dragonflies, and amphibians. Protecting the wetland at the spring source with a fence is an option to consider.</p> <p>107. For most spring developments or wells, mosquito breeding habitat usually is not an issue. Flowing cold (less than 50° Fahrenheit) water and steep sides of the stock tanks are not conducive for egg laying or larvae production. If flows are low, the water is warm, or moss production is an issue in the tank, mosquito breeding habitat could exist in the tank.</p> <p>Maintain stock tanks and ponds/reservoirs such that they are not conducive to mosquito reproduction (little or no silt, algae, or vegetation accumulation). Consider the following options as appropriate:</p> <ul style="list-style-type: none">• Construct water return features and maintain functioning float valves to prohibit water from being spilled on the ground surrounding the trough and/or tank and return water to the original water source, to the extent practicable.• Drain and clean tanks at the end of the season to prevent them from filling with fill with silt or debris, causing warmer water and heavy vegetation growth conducive to mosquito reproduction.• Draining tanks after the period of use is completed, particularly in warmer weather, also reduces potential habitat by eliminating stagnant standing water.• Maintain a properly functioning overflow to prevent water from flowing onto the pad and surrounding area, to eliminate or minimize pooling of water that is attractive to breeding mosquitoes.• Clean or deepen overflow ponds to maintain colder temperatures to reduce mosquito habitat.• Install and maintain float valves on stock tank fill pipes to minimize overflow.• Harden stock tank pads to reduce tracks that can potentially hold water where mosquitoes may breed.• Build ponds with steep shorelines to reduce shallow water (>60 centimeters) and aquatic vegetation around the perimeter of impoundments to deter colonizing by mosquitos (Knight et al. 2003, cited in NTT report page 61).• Consider removing and controlling trees and shrubs to reduce shade and wind barriers on pit and reservoir shorelines if not needed for wildlife, fish, or recreational values.• Impoundments that remain accessible to livestock and wildlife can cause tracking and nutrient enrichment from manure that can create favorable mosquito breeding habitat. Where this is a concern, it may be desirable to fence the reservoir and pipe the water to a tank.

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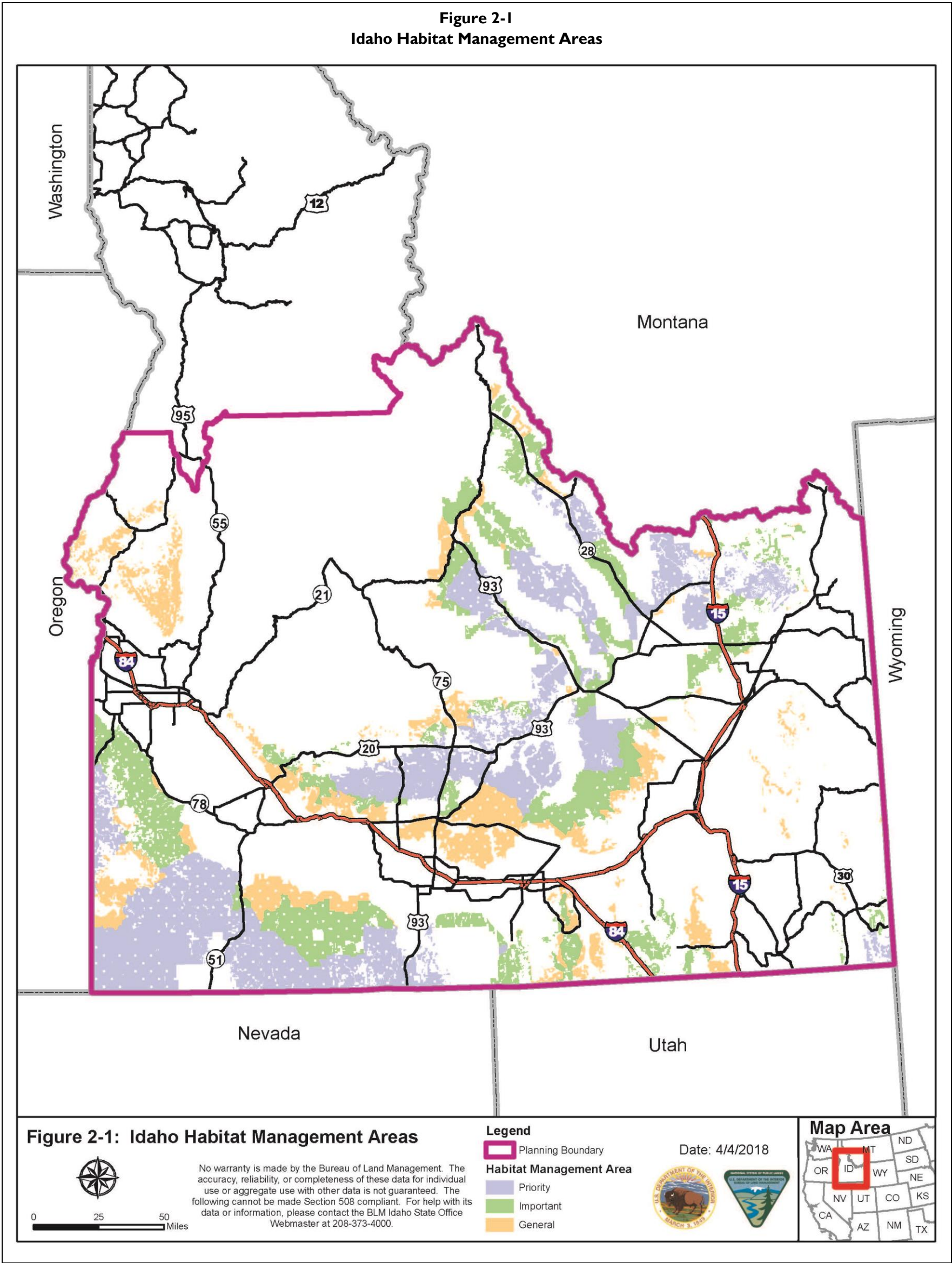
Topic	2015 ARMPA Decision Number	No-Action Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>	Management Alignment Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>
			<ul style="list-style-type: none"> Construct dams or impoundments that minimize down-slope seepage or overflow. Seepage and overflow results in down-grade accumulation of vegetated shallow water areas that support breeding mosquitoes. On ponds and reservoirs with enough depth and volume, consider introducing native fish species, which feed on mosquito larvae. Line the overflow of a dam's spillway with crushed rock and construct the spillway with steep sides to preclude the accumulation of shallow water and vegetation to reduce mosquito habitat. Where an existing reservoir has filled with silt, consider cleaning to reduce shallow water habitat conducive to mosquito reproduction. Develop and maintain non-pond/reservoir watering facilities, such as troughs and bottomless tanks, to provide livestock water. During confirmed West Nile virus outbreaks in Greater Sage-Grouse habitat, consider larvicide applications. <p>Travel Management 108. Designate or design routes to direct use away from priority areas identified in Wildfire and Invasive Species Assessments and still provide for high-quality and sustainable travel routes and administrative access, legislatively mandated requirements, and commercial needs.</p> <p>Recreation 109. Direct use away from seasonally important Greater Sage-Grouse habitats as practicable. 110. Eliminate or minimize external food sources for corvids. 111. Avoid development of new campgrounds or recreation facilities in nesting habitat as practicable.</p>
	Appendix E	Appendix E remains as it is in the 2015 ARMPA	<p>Delete a portion of Appendix E, Starting on Page E-10 at the bullet titled Derivation of the Disturbance Formula through page E-26.</p> <p>Delete the portion of Appendix E that deals with the project-level disturbance cap and the density cap.</p>
	Appendix K	No Appendix K	<p>This will become Appendix K in the New Plan. Idaho proposed using a two-team approach to ensure collaborative implementation efforts regarding Greater Sage-Grouse conservation in Idaho.</p> <p>The following state and federal agencies are expected to collaborate to implement Greater Sage-Grouse conservation in Idaho: Bureau of Land Management (BLM), Fish and Wildlife Service (USFWS), US Forest Service (USFS), Idaho Governor's Office of Species Conservation (OSC), Idaho Department of Fish and Game (IDFG), Idaho State Department of Agriculture (ISDA), Idaho Department of Lands (IDL), United States Geologic Survey (USGS), and Natural Resource Conservation Service (NRCS).</p> <p>Idaho Technical Team: Technical experts from the above mentioned state and federal agencies comprise this team. This team's primary responsibilities are to review and analyze data and proposals related to infrastructure development and conservation actions in Greater Sage-Grouse habitat and make recommendations to the Policy Team. Specifically, their responsibilities include:</p> <ul style="list-style-type: none"> Compile and analyze adaptive management population and habitat trigger data and recommend conservation actions based on the results of their analysis. Perform causal factor analysis when a soft or hard trigger is tripped. Population data are

Table 2-2
Detailed Comparison of Alternatives

Topic	2015 ARMPA Decision Number	No-Action Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>	Management Alignment Alternative <i>Note: References to figures, tables, or appendices are those in the 2015 ROD/ARMPA.</i>
			<p><u>collected under the direction of IDFG, and habitat data on public lands are collected under the direction of the BLM</u></p> <ul style="list-style-type: none"> • <u>Review proposals for large-scale development projects (new transmission lines, highways, power plants, wind or solar farms, etc.) to determine if they meet the necessary anthropogenic screening criteria and development criteria (MD SSS 29 and MD SSS 30). Their findings and recommendations would be submitted to the Policy Team for review and decisions</u> • <u>Review applications for exceptions of the NSO policy in PHMA and IHMA and make recommendations to the Policy Team (MD SSS 29, MD SSS 30, and MD MR 3)</u> • <u>Review applications for exceptions to allow a new free use mineral material pit in PHMA</u> • <u>Review proposals to modify Greater Sage-Grouse habitat designations and make recommendations to the Policy Team.</u> • <u>Review proposals to modify the adaptive management trigger system described in the ARMPA and make recommendations to the Policy Team</u> • <u>Review BSU scale disturbance cap annual report from the BLM National Operations Center</u> • <u>Other duties as the Policy Team may direct</u> <p><u>Idaho Policy Team: Decision-makers from the above mentioned state and federal agencies comprise this team. This team has the following responsibilities:</u></p> <ul style="list-style-type: none"> • <u>Review and discuss recommendations from the Technical Team</u> • <u>Strive for consensus among the team and provide recommendations to the primary decision-maker (BLM State Director for actions occurring on federal public land)</u> • <u>Authorize changes to the adaptive management program</u> • <u>Review and refine the vision for Greater Sage-Grouse management in Idaho</u> • <u>Changes to the duties of the Technical Team must be made by consensus of the Policy Team.</u> <p><u>This collaborative two-team approach provides the foundation for flexibility in Greater Sage-Grouse habitat management in Idaho. The interagency group technical experts in the Technical Team will review and summarize technical data and provide summaries and recommendations to the interagency group of decision-makers in the Policy Team. The Policy Team needs to include the primary decision-maker for whatever proposals come to that team. The remainder of the team will act as policy advisors to aid the primary decision-maker in considering the recommendations of the Technical Team. This process will ensure that both the technical and the policy related issues for each agency are considered as part of Greater Sage-Grouse management in Idaho. Meetings/coordination of the Policy Team will be led by the primary decision-maker of the proposal being discussed. Only proposals for large-scale anthropogenic disturbances need to be submitted.</u></p>

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Figure 2-1 displays the updated Habitat Management Areas proposed in the Management Alignment Alternative.



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2.6 PREFERRED ALTERNATIVE

BLM regulations require the agency to identify a preferred alternative in the Draft RMPA/EIS (43 CFR 1610.4-7). The preferred alternative represents those goals, objectives, and actions determined to be most effective at resolving planning issues and balancing resource use at this stage of the process. While collaboration is critical in developing and evaluating alternatives, the final designation of a preferred alternative remains the responsibility of the lead agency, which is the BLM for this project. The agency has identified the Management Alignment Alternative as the preferred alternative.

It is important to note that the identification of a preferred alternative does not constitute a final decision, and there is no requirement that the preferred alternative identified in the Draft RMPA/EIS be selected as the agencies' decision in the ROD. Various parts of separate alternatives that are analyzed in this Draft RMPA/EIS can be "mixed and matched" to develop a proposed plan. With respect to compensatory mitigation in particular, at the request of the State, the Management Alignment Alternative in this Draft RMPA/EIS proposes a change to compensatory mitigation by modifying the net conservation gain standard that the BLM incorporated into its plans in 2015. The DOI and the BLM have also modified their mitigation policies since the 2015 plans were finalized. The public did not have the opportunity to comment specifically on a net conservation gain approach to compensatory mitigation during the 2015 land use planning process. In addition, the DOI and the BLM are evaluating whether the implementation of compensatory mitigation standard on public lands is appropriate and consistent with applicable legal authorities. We request public comment about how the BLM should consider and implement mitigation with respect to the Greater Sage-Grouse, including alternative approaches to requiring compensatory mitigation in BLM land use plans.

2.7 PLAN EVALUATION, MONITORING, AND ADAPTIVE MANAGEMENT

Plan evaluation is the process by which the plan and monitoring data are reviewed to determine if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, if mitigation measures are satisfactory, if there are significant changes in the related plans of other entities, if there is new data of significance to the plan, and if decisions should be amended or revised.

Monitoring data gathered over time is examined and used to draw conclusions on whether management actions are meeting stated objectives, and if not, why not. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet objectives. The BLM will use land use plan evaluations to determine if the decisions in the ARMPA, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluations will follow the protocols established by the BLM Land Use Planning Handbook (H-1601-1) or other appropriate guidance in effect at the time the evaluation is initiated.

The ARMPA also includes an adaptive management strategy that includes soft and hard triggers and responses. These triggers are not specific to any particular project but identify habitat and population thresholds. Triggers are based on the two key metrics that are being monitored during the life of the ARMPA: habitat loss and population declines. Soft triggers represent an intermediate threshold indicating that management changes are needed at the implementation level to address habitat or population losses. If a soft trigger were tripped during the life of the plans, the BLM's response would be to apply more conservative or restrictive conservation measures to mitigate for the specific cause in the

decline of populations or habitats, with consideration of local knowledge and conditions. These adjustments will be made to preclude tripping a “hard” trigger (which signals more severe habitat loss or population declines).

Hard triggers represent a threshold indicating that immediate action is necessary to stop a severe deviation from Greater Sage-Grouse conservation objectives set forth in the 2015 ROD/ARMPA. In the event that new scientific information becomes available demonstrating that the response to the hard trigger would be insufficient to stop a severe deviation from Greater Sage-Grouse conservation objectives set forth in the 2015 ROD/ARMPA, the BLM would implement interim management direction to ensure that conservation options are not foreclosed. The BLM would also undertake any appropriate plan amendments or revision if necessary. More information regarding the 2015 ROD/ARMPA’s adaptive management strategy can be found in Appendix E of the 2015 ROD/ARMPA. Additional information about changes to the adaptive management strategy in this plan are in **Table 2-2**, above.

Chapter 3. Affected Environment

3.1 INTRODUCTION

The purpose of this chapter is to describe the existing biological, physical, and socioeconomic characteristics of the planning area, including human uses that could be affected by implementing the alternatives described in **Chapter 2**. The affected environment provides the context for assessing the potential impacts described in **Chapter 4**. The resource topics in this chapter reflect those that are identified in **Table I-1** as corresponding to an issue carried forward for detailed analysis in this RMPA/EIS.

The geographic extent of this environmental analysis is the same as that in the 2015 Final EIS. The BLM acknowledges that there have been changes to the landscape since 2015; however, because this analysis covers nearly 12 million acres of BLM-administered lands and approximately 36.5 million (subsurface) acres of federal mineral estate, the data collected consistently across the range indicate that the extent of these changes is relatively minimal. For example, BLM monitoring data collected and analyzed annually at the biologically significant unit (BSU) scale, as outlined in the Greater Sage-Grouse Monitoring Framework (Appendix D of the 2015 ARMPA/ROD), indicate that there has been a less than 1 percent range-wide overall increase in estimated disturbance from 2015 through 2017. Moreover, there has been an overall decrease of less than 1 percent range-wide from 2012 through 2015 in sagebrush availability in PHMA within BSUs.

The estimates of acres within Greater Sage-Grouse habitat management areas burned in 2016 and 2017 indicate a sharp increase in potential habitat availability loss, compared with previous fire seasons; however, the acres lost do not necessarily affect monitored PHMA and IHMA in BSUs. For this reason, burned acres are most influential at scales below which the environmental analysis would be conducted.

Based on available information, including the USGS reports described below, the BLM has concluded that the existing condition is not substantially different from that of 2015; therefore, the data and information presented in the 2015 Final EIS are incorporated into this RMPA/EIS.

Actions that have been authorized since the 2015 ROD/ARMPA were consistent with the 2015 Final EIS. The BLM would continue to implement the decisions in the 2015 ROD/ARMPA unless those decisions are amended.

Acreage figures and other numbers were approximated using geographic information systems (GIS) technology; they do not reflect exact measurements or precise calculations.

Planning Area Overview – Description of the Planning Area and Current Management

In general, Greater Sage-Grouse habitats in Idaho are composed of a variety of species and subspecies of sagebrush, including mountain big sagebrush, Wyoming big sagebrush, Great Basin big sagebrush, low sagebrush, black sagebrush, three-tip sagebrush, and early sagebrush. Conifer encroachment into Greater Sage-Grouse habitats, mainly from Utah juniper and western juniper, occurs primarily in south-central and southwestern Idaho, although encroachment of Douglas-fir and other conifers also occurs at higher elevations. Large areas of native, introduced, or mixed native/introduced perennial grasslands as

well as annual grasslands are also present in portions of the Snake River Plain in southern Idaho as a result of recent wildfires and associated rehabilitative efforts or from other rangeland seeding efforts during the 20th century. The general condition and trend of habitats on BLM-administered lands is a result of various threats that are currently occurring or that have occurred historically. In Idaho, threats to Greater Sage-Grouse were ranked by an independent science panel and addressed in the Conservation Plan for the Greater Sage-Grouse in Idaho (Idaho Sage-grouse Advisory Committee 2006). Highest ranking threats, in order of relative score, included wildfire, infrastructure, annual grasslands, livestock impacts, human disturbance, and West Nile virus.

In 2006, the WAFWA used floristic characteristics to organize the diverse sagebrush habitat areas into seven Greater Sage-Grouse management zones within the species' distribution (Stiver et al. 2006). Idaho contains portions MZs II and IV. The vast majority of Idaho lies within WAFWA's Greater Sage-Grouse MZ IV (Stiver et al. 2006); a small portion of southeastern Idaho occurs within MZ II and is associated with the Wyoming Basin population. Populations of Greater Sage-Grouse in MZ IV are projected to decline by 55 percent from 2007 to 2037 and by 66 percent in MZ II if current trends in populations and habitat activities continue (USFWS 2010a; Garton et al. 2011).

Greater Sage-Grouse populations have declined range-wide since the late 1800s (USFWS 2010, p. 13921). More recently, Connelly et al. (2004) reported long-term declines (1965 to 2004) for Greater Sage-Grouse in MZs II and IV. WAFWA (2008) reported declines from 1965 to 2007 of 2.7 percent in MZ II and 3.8 percent, in MZ IV. Garton et al. (2011) reported annual rates of decline of 3.5 percent in MZ II and 4 percent in MZ IV.

USGS Reports

As part of the consideration of whether to amend some, all, or none of the 2015 Greater Sage-Grouse land use plans, the BLM requested the USGS to develop an annotated bibliography of Greater Sage-Grouse science published since January 2015 (Carter et al. 2018) and a report that synthesizes and outlines the potential management implications of this new science (Hanser et al. 2018).

Following the 2015 ROD/ARMPAs, the scientific community has continued to improve the knowledge available to inform management actions and an overall understanding of Greater Sage-Grouse populations, habitat requirements, and their response to human activity. The review discussed the science related to six major topics identified by USGS and BLM, as follows:

- Multiscale habitat suitability and mapping tools
- Discrete human activities
- Diffuse activities
- Fire and invasive species
- Restoration effectiveness
- Population estimation and genetics

Multiscale Habitat Suitability and Mapping Tools

The science developed since 2015 corroborates previous knowledge about Greater Sage-Grouse habitat selection. Advances in modeling and mapping techniques at the landscape scale can help inform allocations and targeting of land management resources to benefit Greater Sage-Grouse conservation.

Similar improvements at the site scale facilitate a better understanding of the importance of grass height to nest success, which indicates the potential need for a reevaluation of the existing habitat objectives (Hanser et al. 2018, p. 2).

The BLM has completed a plan maintenance action whereby the agency has clarified its ability to modify the habitat objective indicator values based upon local, site-specific information.

Discrete Human Activities

The science developed since 2015 corroborates prior knowledge about the impact of discrete human activities on Greater Sage-Grouse. New science suggests that strategies to limit surface disturbance may be successful at limiting range-wide population declines; however, it is not expected to reverse the declines, particularly in areas of active oil and gas operations (Hanser et al. 2018, p. 2). This information may have relevance when considering the impact of changes to management actions designed to limit discrete disturbances.

Diffuse Activities

The science developed since 2015 does not appreciably change prior knowledge about diffuse activities, such as livestock grazing, predation, hunting, wild horses and burros, fences, recreation, and noise; however, some study authors questioned current assumptions, provided refinements, or corroborated existing understanding.

Studies have shown that the impacts of livestock grazing vary with grazing intensity and season. Predation from ravens can limit Greater Sage-Grouse populations in areas with overabundant predator numbers or degraded habitats. Applying predator control has potential short-term benefits in small, declining populations; however, reducing human subsidies may be necessary to generate long-term changes in raven numbers. This is because raven control has produced only short-term declines in local raven populations.

Refinements to the current hunting seasons used by State wildlife agencies may minimize potential impacts on Greater Sage-Grouse populations; however, none of the studies singled out current application of hunting seasons and timings as a plausible cause for Greater Sage-Grouse declines.

Finally, no new insights into the impacts of wild horses and burros, fence collision, recreation, or noise on Greater Sage-Grouse have been developed (Hanser et al. 2018, p. 2).

This information was considered when determining the scoping issues addressed in **Chapter I, Section I.5**.

Fire and Invasive Species

Science since 2015 indicates that wildfire will continue to threaten Greater Sage-Grouse through loss of available habitat, reductions in multiple vital rates, and declining population trends, especially in the western part of its range. The concepts of resilience after wildfire and resistance to invasion by nonnative annual grasses have been mapped across the sagebrush ecosystem. These concepts inform restoration and management strategies and help prioritize application of Greater Sage-Grouse management resources (Hanser et al. 2018, p. 2).

Restoration Effectiveness

Since 2015, tools have been developed to help managers strategically place and design restoration treatments where they will have the greatest benefit for Greater Sage-Grouse. Studies (Hanser et al. 2018, p. 3) indicate that Greater Sage-Grouse populations did not benefit from, or were negatively affected by, prescribed fire and mechanical sagebrush removal.

Restoration activities occur mainly at the implementation level, and the BLM maintains the flexibility to incorporate new tools in the agency's project planning for restoration actions.

Population Estimation and Genetics

The accuracy of estimating Greater Sage-Grouse populations has increased. This is because of improved sampling procedures used to complete count surveys at leks and the development of correction factors for potential bias in lek count data. In addition, techniques have also improved to map Greater Sage-Grouse genetic structure at multiple spatial scales. These genetic data are used in statistical models to increase understanding of how landscape features and configuration affect gene flow. This understanding emphasizes the importance of maintaining connectivity between populations to ensure genetic diversity and distribution (Hanser et al. 2018, p. 3).

New information continues to reaffirm BLM's understanding that Greater Sage-Grouse is a species that selects for large, intact landscapes and habitat patches.

3.2 RESOURCES AFFECTED

In accordance with **Chapter 1, Section 1.5**, the following resources may have potentially significant impacts based on the actions considered in **Chapter 2. Table 3-1**, below, provides a list of issues and affected resource(s), the location of baseline information in the 2015 Final EIS, as well as additional information contained in the 2016 Draft Sagebrush Focal Area Withdrawal EIS (BLM 2016). See the 2015 Final EIS baseline information.

Table 3-1
Affected Environment Incorporated by Reference

Issue Number	Issue	Resource Topic
1	Modifying Management Area Designations	Greater Sage-Grouse, Section 3.2, pg. 3-5 (BLM 2015)
2	Sagebrush Focal Area Designations	Mineral Resources, Section 3.12, pg. 3-98 Greater Sage-Grouse, Section 3.2, pg. 3-5 Livestock Grazing, Section 3.8, pg. 3-65 Wild Horse and Burro, Section 3.6, pg. 3-54 In addition to the 2015 Final EIS, additional information can be found in the 2016 Draft Locatable Mineral Withdrawal EIS in Section 2.3.1 (No Action Alternative; page 2-4) and Section 3.4 (Geology and Mineral Resources; page 3-7)
3	Adjusting Disturbance and Density Caps	Greater Sage-Grouse, Section 3.2, pg. 3-5 Mineral Resources, Section 3.12, pg. 3-98 Lands and Realty, Section 3.11, pg. 3-84 Socioeconomics, Section 3.22, pg. 3-164

**Table 3-1
Affected Environment Incorporated by Reference**

Issue Number	Issue	Resource Topic
4	Modifying Lek Buffers	Greater Sage-Grouse, Section 3.2, pg. 3-5 Mineral Resources, Section 3.12, pg. 3-98 Lands and Realty, Section 3.11, pg. 3-84 Socioeconomics, Section 3.22, pg. 3-164 Livestock Grazing, Section 3.8, pg. 3-65 Recreation, Section 3.9, pg. 3-71
5	Including Waivers, Exceptions, and Modifications on NSO Stipulations	Greater Sage-Grouse, Section 3.2, pg. 3-5 Mineral Resources (fluids), Section 3.12, pg. 3-98
6	Changing Requirements for Design Features	Greater Sage-Grouse, Section 3.2, pg. 3-5 Mineral Resources, Section 3.12, pg. 3-98 Lands and Realty, Section 3.11, pg. 3-84 Socioeconomics, Section 3.22, pg. 3-164 Livestock Grazing, Section 3.8, pg. 3-65
7	Modifying Habitat Objectives	Greater Sage-Grouse, Section 3.2, pg. 3-5
8	Modifying Livestock Grazing Commensurate with the Threat Posed	Livestock Grazing, Section 3.8, pg. 3-65 Greater Sage-Grouse, Section 3.2, pg. 3-5
9	Modifying the Mitigation Strategy to Align with the State Mitigation Strategy, including Standard for No Net Loss	Greater Sage-Grouse, Section 3.2, pg. 3-5 Mineral Resources, Section 3.12, pg. 3-98 Lands and Realty, Section 3.11, pg. 3-84 Socioeconomics, Section 3.22, pg. 3-164 Livestock Grazing, Section 3.8, pg. 3-65 Recreation, Section 3.9, pg. 3-71

3.3 GREATER SAGE-GROUSE

The existing condition of Greater Sage-Grouse in the planning area is described in the 2015 Final EIS in Section 3.2 (pgs. 3-5 thru 3-23). Since 2015, designated Greater Sage-Grouse habitat in Idaho has been managed according to the 2015 ROD/ARMPA. In 2015, the Greater Sage-Grouse Approved Resource Management Plan Amendment (2015 ROD/ARMPA) designated approximately 8,809,326 acres of Greater Sage-Grouse habitat management areas (BLM only) with 4,177,624 acres of PHMA, 2,675,251 acres of IHMA, and 1,956,451 acres of GHMA. The 2015 ROD/ARMPA also used a key habitat map to identify areas with at least 10 percent sagebrush canopy cover, and in 2015 there were approximately 9,158,175 acres mapped as key habitat in 2015. The total acres of key habitat on BLM-administered land (acres with estimated 10 percent sagebrush cover) in Idaho has decreased an estimated 53,379 acres from 5,164,998 in 2015 to 5,111,619 at the end of 2017.

In 2015 the Soda Fire burned a total of 279,144 acres, with 228,077 acres burned in Idaho. The West Owyhee Conservation Area lost approximately 5 percent (approximately 74,127 acres) of its priority habitat BSU and approximately 21 percent (approximately 63,383 acres) of its important habitat BSU. This resulted in a hard trigger being tripped and currently all of the IHMA within the West Owyhee Conservation Area is being managed as PHMA as per the 2015 ROD/ARMPA.

Wildland Fire

Wildfire was identified and considered as a primary threat to Greater Sage-Grouse habitat within the Great Basin in the 2015 Final EIS (Wildland Fire Management, Section 3.7 [pgs. 3-57 thru 3-65]). Between 2015 and 2017 wildfires burned approximately 129,842 acres of Key habitat and 534,744 acres

of Greater Sage-Grouse habitat (160,520 acres of priority, 240,079 acres of important, and 134,145 acres of general). Since 2015, the BLM has completed 431,295 acres of treatments to restore or improve potential Greater Sage-Grouse habitat. Since the 2015 ROD/ARMPA, more habitat has been lost to wildfire than has been gained through treatment. However, the BLM intends to implement more habitat improvements per decisions in the 2015 ROD/ARMPA. Projects such as the Great Basin Ecosystem Strategy, under which two programmatic EISs will be prepared for fuel breaks and fuels reduction and rangeland restoration, will further define the tools and priorities for these activities.

3.4 LANDS AND REALTY

The existing condition of Land Use and Realty in the planning area is described in the 2015 Final EIS in Section 3.11 (Lands and Realty, pgs. 3-84 thru 3-98). Land use authorization requests are customer driven. Within the planning area most authorizations processed are primarily for roads, electric distribution lines, and communications sites. Major ROWs are those large-scale utility projects, such as for 500kV electric transmission, wind, and solar development. The BLM has received a number of applications for major transmission line projects to traverse the state. The BLM has not received any applications for utility-scale solar production in the planning area, nor are there solar resources comparable to the areas where utility-scale solar production projects are being proposed or built.

Since 2015, lands and realty actions were authorized following the 2015 ROD/ARMPA direction. Management for the Lands and Realty program is described in Sections 2.2.1 and 2.2.8 of the 2015 ROD/ARMPA. The BLM continues to manage the Lands and Realty program following the management direction in the 2015 decision. Since September 2015, BLM Idaho has issued 97 new ROWs and has 123 ROWs pending approval. The Lands and Realty Program is essentially the same as was described in the 2015 FEIS and the program's impacts on Greater Sage-Grouse are also essentially the same.

3.5 MINERALS

The existing conditions of minerals development in the planning area are described in the 2015 Final EIS in Section 3.12.1 for Fluid Leasable Minerals (pgs. 3-98 thru 3-103), Mineral Materials (pgs. 3-103 thru 3-106), Locatable Minerals (pgs. 3-106 thru 3-111), and Trends (pgs. 3-112 thru 3-117). The management of minerals is described in Sections 2.2.1 and 2.2.6 Mineral Resources for both Fluid and Salable minerals. In addition, this RMPA/EIS incorporates resources affected by the 2016 Draft Sagebrush Focal Area Withdrawal EIS completed for the mineral withdrawal recommendation (Chapter 3, Section 3.4 [Geology and Mineral Resources], page 3-7 [BLM 2016] and Chapter 2, Section 2.3.1 [No Action Alternative], page 2-4 [BLM 2016]). Little has changed in minerals development in Idaho since 2015, most notably there is now one producing natural gas well near Weiser, Idaho. This natural gas well is on private land but is removing some gas from adjacent leased public land. The public land is not designated as Greater Sage-Grouse habitat. The existing Geothermal Power plant in the Raft River Valley in Idaho has also expanded onto public land in GHMA. One new Phosphate Mine Plan was approved in Idaho since 2015. Additionally, only four new free, use (County use) mineral material pits have been authorized in Idaho since 2015. Based on these minimal changes, the existing conditions are essentially the same as described in the 2015 EIS.

3.6 LIVESTOCK GRAZING

The existing condition of livestock grazing in the planning area is described in the 2015 Final EIS in Section 3.8 (pgs. 3-65 thru 3-71). Since 2015, the BLM has continued to manage livestock according to the grazing regulation (C.F.R. 4100) and in Sections 2.2.1 and 2.2.4 of the 2015 ROD/ARMPA. In general,

the existing conditions of livestock grazing in Idaho remain the same as described in the 2015 Final EIS. The BLM has continued to issue grazing permit renewals consistent with the 2015 ROD. Since September 2015, BLM Idaho has issued 69 grazing permits.

3.7 SOCIOECONOMICS

The Socioeconomic conditions within the planning area are described in the 2015 Final EIS in Section 3.22 (Social and Economic Conditions [Including Environmental Justice], pgs. 3-164 thru 3-200). BLM-administered lands provide a range of goods and services that benefit society in a variety of ways. Some of these goods and services, such as timber and minerals, are bought and sold in markets, and hence have a readily observed economic value (as documented in the sections above); others have a less clear connection to market activity, even though society derives benefits from them. In some cases, goods and services have both a market and a non-market component value to society. The socioeconomic conditions in Idaho are essentially the same as described in the 2015 EIS.

3.8 WILD HORSE AND BURRO

The existing condition of Wild Horse and Burro (WHB) within the planning area is described in the 2015 Final EIS in Section 3.6 (Wild Horse and Burro Management, pgs. 3-54 thru 3-57). Within the planning area, the BLM manages six HMAs, all in the state of Idaho: four in the Boise District, one in the Twin Falls District, and one in the Idaho Falls District. The HMAs encompass approximately 361,900 acres of BLM-administered lands. Idaho BLM continues to manage wild horses within AML statewide. In 2015, the Hardtrigger, Black Mountain, and Sand Basin HMAs were burned during the Soda Fire and horses were gathered off these HMAs until vegetation had recovered sufficiently to provide reliable forage. The BLM also gathered horses in Challis HMA in 2017. The horses gathered after the Soda fire will be returned to those HMAs in 2018 because monitoring data has shown that the vegetation has recovered sufficiently to provide reliable forage and will continue to be managed according to the applicable regulations and the 2015 ROD/ARMPA.

3.9 RECREATION

The existing condition of recreation within the planning area is described in the 2015 Final EIS in Section 3.9 (pgs. 3-71 thru 3-78). Currently recreation in Idaho remains essentially the same as described in the 2015 EIS and is managed as described in the 2015 ROD/ARMPA. In 2012, the BLM had 341 active SRPs. Of those SRPs, 241 were commercial river permits and 24 are commercial big game hunting permits. The remaining SRPs are for organized groups, competitive events, or other types of commercial recreation outfitters (e.g., bike tours). BLM Idaho has continued to issue special recreation permits at levels commensurate with the 2015 numbers. BLM Idaho's biggest recreation undertaking, after the signing of the 2015 ROD, has been in travel management planning. BLM initiated six travel plans on the Boise District; five plans on the Idaho Falls District; and two plans on the Twin Falls District.

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Chapter 4. Environmental Consequences

4.1 INTRODUCTION

This chapter presents the anticipated direct and indirect impacts on the human and natural environment from implementing the alternatives in **Chapter 2**. The purpose of this chapter is to describe to the decision-maker and the public how the environment could change if either of the alternatives were implemented. It is meant to aid in the decision of which alternative, if any, to adopt.

This chapter is organized by issue, as identified in **Chapters 1** and **3**. Only those issues listed in **Table I-1** were carried forward for analysis.

Impact analysis is a cause-and-effect process. The detailed impact analyses and conclusions are based on the following:

- The BLM planning team's knowledge of resources and the project area
- Literature reviews
- Information provided by experts in the BLM, other agencies, cooperating agencies, interest groups, and concerned citizens

The baseline used for the impact analysis is the current condition or situation, as described in **Chapter 3**. Impacts on resources and resource uses are analyzed and discussed in detail, commensurate with resource issues and concerns identified through the process. At times, impacts are described in qualitative terms or using ranges of potential impacts.

4.2 ANALYTICAL ASSUMPTIONS

Several overarching assumptions have been made in order to facilitate the analysis of the project impacts. These assumptions set guidelines and provide reasonably foreseeable projected levels of development that would occur in the planning area during the planning period. These assumptions should not be interpreted as constraining or redefining the management objectives and actions proposed for each alternative, as described in **Chapter 2**.

In 2012 Governor C. L. "Butch" Otter proposed an approach that divided Greater Sage-Grouse habitat in Idaho into three management zones. These three zones provide a management continuum where the highest priority habitats have the most protections, and the lowest priority habitats have the fewest protections and the most flexibility for multiple use management. This approach allows land management agencies to focus future disturbance in lower quality habitat or non-habitat areas.

The 2015 Final EIS adopted this strategy and identified the habitat management zones as PHMA, Important Habitat Management Areas (IHMA), and GHMA; both alternatives in this RMPA/EIS continue this theme. The 2012 Governor's plan uses the terminology of core habitat zone (CHZ), important habitat zone (IHZ), and general habitat zone (GHZ); these are equivalent to PHMA, IHMA, and GHMA, respectively.

These management zones were developed based on their overall importance to Greater Sage-Grouse, considering the densities of breeding birds, habitat quality and connectivity as a result of decades of

research and monitoring. PHMA contains approximately 67 percent of known occupied leks in Idaho, IHMA contains 25 percent, and GHMA contains 6 percent, respectively.

The following general assumptions apply to the analysis of both alternatives; any specific resource assumptions are provided in the methods of analysis section for that resource:

- Sufficient funding and personnel would be available for implementing the final decision.
- Implementation-level actions necessary to execute the RMP-level decisions in this RMPA would be subject to further environmental review, including that under NEPA.
- Direct and indirect impacts of implementing the RMPA would primarily occur on public lands administered by the BLM in the planning area.
- The BLM would carry out appropriate maintenance for the functional capability of all developments.
- The discussion of impacts is based on best available data. Knowledge of the planning area and decision area and professional judgment, based on observation and analysis of conditions and responses in similar areas, are used for environmental impacts where data are limited.
- Restrictions (such as siting, design, and mitigation measures) would apply, where appropriate, to surface-disturbing activities associated with land use authorizations and permits issued on BLM-administered lands and federal mineral estate.
- GIS data have been used in developing acreage calculations and to generate the figures in this EIS. Calculations depend on the quality and availability of data. Acreage figures and other numbers are approximate projections for comparison and analysis only; readers should not infer that they reflect exact measurements or precise calculations. In the absence of quantitative data, best professional judgment was used. Impacts were sometimes described using ranges of potential impacts, or they were described qualitatively, when appropriate.

4.3 GENERAL METHOD FOR ANALYZING IMPACTS

Potential impacts are described in terms of type, context, duration, and intensity, which are generally defined below.

Type of impact—Impacts are characterized using the indicators described at the beginning of each resource impact section. The presentation of impacts for key planning issues is intended to provide the BLM decision-maker and reader with an understanding of the multiple use trade-offs associated with each alternative.

Context—This describes the area or site-specific, local, planning area-wide, or regional location where the impact would occur. Site-specific impacts would occur at the location of the action; local impacts would occur in the general vicinity of the action area; planning area-wide impacts would affect a greater portion of decision area lands in Idaho; and regional impacts would extend beyond the planning area boundaries.

Duration—This describes the duration of an impact, either short term or long term. Unless otherwise noted, short term is defined as anticipated to begin and end within the first 5 years after the action is implemented; long term is defined as lasting beyond 5 years to the end of or beyond the life of this RMPA.

Intensity—Rather than categorize impacts by intensity (e.g., major, moderate, or minor), this analysis discusses impacts using quantitative data wherever possible.

Direct and indirect impacts—Direct impacts are caused by an action or implementation of an alternative and occur at the same time and place; indirect impacts result from implementing an action or alternative but usually occur later in time or are removed in distance and are reasonably certain to occur.

For ease of reading, the impacts of the management actions for a particular alternative on a specific resource are generally compared to the status quo or baseline for that resource; however, in order to properly and meaningfully evaluate the impacts under each alternative, its expected impacts should be measured against those projected to occur under the No-Action alternative. This alternative is the baseline for comparing the alternatives to one another. This is because it represents what is anticipated to occur should the RMPAs not take place.

Irreversible and irretrievable commitment of resources is discussed in **Section 4.9**. Irreversible commitments of resources result from actions in which resources are considered permanently changed; irretrievable commitments of resources result from actions in which resources are considered permanently lost.

Table 4-1, below, shows where the effects analysis can be found in the 2015 Final EIS or, where noted, the 2016 Draft Sagebrush Focal Area Withdrawal EIS (BLM 2016). Resource topics displayed below are the resource topics identified in **Table 1-1** as potentially being affected by the issues. This table is included to help the reader track issues and resource topics.

Table 4-1
Environmental Consequences Incorporated by Reference

Potentially Impacted Resource Topic	Location in 2015 Final EIS	Related Issues Tracking
Greater Sage-Grouse	Section 4.2: Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)	1-9
Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals, pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)	2, 3, 4, 5, 6, 9
Land Use and Realty	Section 4.8, Lands and Realty: pg. 4-208	4, 6, 9
Socioeconomics	Section 4.15, Social and Economic Conditions (Including Environmental Justice), pg. 4-290 Section 4.3, Social and Economic, pg. 4-20 (BLM 2016)	3, 4, 6, 9
Livestock Grazing	Section 4.6, Livestock Grazing/Range Management, pg. 4-173	2, 4, 6, 8, 9
Wild Horses and Burros	Section 4.4.10, pgs. 4-151–4-154	2,
Recreation	Section 4.8.3, pg. 4-211 Section 4.6.3, pg. 4-179 Section 4.4.3, pg. 4-142 Section 4.5.2, pg. 4-159	4, 9

Impacts from No Action

The impacts of the No-Action Alternative, or current management, of this RMPA/EIS were analyzed as the Proposed Plan in the 2015 Final EIS. The BLM has reviewed new information to verify that the analysis in the 2015 Final EIS remains sound; therefore, impacts from implementing the No-Action Alternative are substantially the same as those analyzed in the 2015 Final EIS.

Table 4-2, below, shows where information on the impacts of the No-Action Alternative can be found.

Table 4-2
Environmental Consequences for the No-Action Alternative Incorporated by Reference

Decision Topic	Related Resource Topic	Location in 2015 Final EIS and 2016 Draft Sagebrush Focal Area Withdrawal EIS
Modifying habitat management area boundaries	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
Removing sagebrush focal area designations	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
	Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals, pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)
	Livestock Grazing	Section 4.6, Livestock Grazing/Range Management, pg. 4-173
	Wild Horse and Burro	Section 4.4.10, pgs. 4-151–4-154
Adjusting disturbance and density caps	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
	Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals: pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)
	Socioeconomics	Section 4.15, Social and Economic Conditions (Including Environmental Justice), pg. 4-290 Section 4.3, Social and Economic, pg. 4-20 (BLM 2016)
	Lands and Realty	Section 4.8, Lands and Realty, pg. 4-208
Modifying lek buffers	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse), pg. 4-82 (BLM 2016)
	Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals, pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)

Table 4-2
Environmental Consequences for the No-Action Alternative Incorporated by Reference

Decision Topic	Related Resource Topic	Location in 2015 Final EIS and 2016 Draft Sagebrush Focal Area Withdrawal EIS
	Socioeconomics	Section 4.15, Social and Economic Conditions (Including Environmental Justice), pg. 4-290 Section 4.3, Social and Economic, pg. 4-20 (BLM 2016)
	Lands and Realty	Section 4.8, Lands and Realty, pg. 4-208
	Livestock Grazing	Section 4.6, Livestock Grazing/Range Management, pg. 4-173
	Recreation	Section 4.8.3, pg. 4-211; Section 4.6.3, pg. 4-179; Section 4.4.3, pg. 4-142, Section 4.5.2, pg. 4-159
Including waivers, exceptions, and modifications on NSO stipulations	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
	Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals, pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)
Changing requirements for design features	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
	Land Use and Realty	Section 4.8, Lands and Realty, pg. 4-208
	Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals, pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)
	Socioeconomics	Section 4.15, Social and Economic Conditions (Including Environmental Justice), pg. 4-290 Section 4.3, Social and Economic, pg. 4-20 (BLM 2016)
	Livestock Grazing	Section 4.6, Livestock Grazing/Range Management, pg. 4-173
Modifying habitat objectives	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
Modifying decisions for livestock grazing commensurate with the threat posed	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5: Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
	Livestock Grazing	Section 4.6, Livestock Grazing/Range Management, pg. 4-173
Modifying the mitigation strategy to align with the state mitigation strategy, including standard for no net loss	Greater Sage-Grouse	Section 4.2, Sage-Grouse and Sage-Grouse Habitat, pg. 4-5 Section 4.5, Wildlife, Including Special Status Species and Greater Sage-Grouse, pg. 4-82 (BLM 2016)
	Socioeconomics	Section 4.15, Social and Economic Conditions (Including Environmental Justice), pg. 4-290 Section 4.3, Social and Economic, pg. 4-20 (BLM 2016)
	Livestock Grazing	Section 4.6, Livestock Grazing/Range Management: pg. 4-173

Table 4-2
Environmental Consequences for the No-Action Alternative Incorporated by Reference

Decision Topic	Related Resource Topic	Location in 2015 Final EIS and 2016 Draft Sagebrush Focal Area Withdrawal EIS
	Minerals and Energy	Section 4.9, Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals, pg. 4-224 Section 4.10, Locatable Minerals, pg. 4-249 Section 4.11, Mineral Materials (Salable), pg. 4-254 Section 4.12, Nonenergy Leasable Minerals, pg. 4-259 Section 4.2, Geology and Mineral Resources, pg. 4-7 (BLM 2016)
	Land Use and Realty	Section 4.8, Lands and Realty, pg. 4-208
	Recreation	Section 4.8.3, pg. 4-211; Section 4.6.3, pg. 4-179; Section 4.4.3, pg. 4-142; Section 4.5.2, pg. 4-159

Impact from the Management Alignment Alternative

The effects analysis from the 2015 Final EIS for the applicable portions of the Proposed Plan and Alternative E (the Governor's Alternative) are carried forward into this RMPA/EIS. The No-Action Alternative for this RMPA/EIS was identified as the Proposed Plan in the 2015 Final EIS. The 2012 Governor's plan was identified as Alternative E in the 2015 Final EIS. The effects of the changes proposed in the Management Alignment Alternative were generally within the range of impacts identified among the alternatives considered in the 2015 Final EIS.

Table 4-3, below, summarizes if and how decisions in the Management Alignment Alternative were considered in the 2015 Final EIS. Issues needing further analysis are analyzed further in this chapter.

Table 4-3
Consideration of Management Alignment Alternative Components in the 2015 Final EIS

Management Alignment Alternative	Considered in 2015
Modifying habitat management areas	Various habitat management area configurations were proposed in 2015, Section 2.9, pg. 2-83.
Removing SFA designations	All alternatives in 2015 considered the absence of SFA designation.
Adjusting density caps	Density caps of an average of one energy and mining facility per 640 acres in PHMA were considered as the Proposed Plan (pg. 2-30).
Modifying disturbance caps	Human disturbance cap of 3 percent within PHMA in any BSU, excluding disturbance from wildfire and fuels management activities, was considered as the Proposed Action (pg. 2-29).
	The Proposed Action in the 2015 Final EIS considered human disturbance criteria and development prioritization (pg. 2-31).
Modifying lek buffers	The application of lek buffers was considered as the Proposed Plan (pg. 2-34), except for the buffers' inapplicability to vegetation treatments specifically designed to improve or protect Greater Sage-Grouse habitat. Various lek buffers were considered among the alternatives in Chapter 2.

Table 4-3
Consideration of Management Alignment Alternative Components in the 2015 Final EIS

Management Alignment Alternative	Considered in 2015
Including waivers, exceptions, and modifications on NSO stipulations	<p>Under the Proposed Plan in the 2015 Final EIS, areas within PHMA and IHMA would be open to development and leasing and subject to an NSO stipulation, with a limited exception (pg. 2-51).</p> <p>Under the Proposed Plan in the 2015 Final EIS, nominated parcels would be evaluated for development feasibility prior to lease offering (pg. 2-51).</p> <p>The Proposed Plan in the 2015 Final EIS considered criteria for the granting of exceptions to the NSO stipulation (pg. 2-52), except that the criteria were based on a different conservation standard (i.e., conservation gain versus no net loss).</p> <p>Alternative D in the 2015 Final EIS considered a no net loss standard.</p> <p>Alternatives A and E in the 2015 Final EIS considered the absence of written orders of the BLM Authorized Officer, requiring reasonable protective measures for Greater Sage-Grouse.</p>
Changing requirements for design features	<p>The Proposed Plan in the 2015 Final EIS considered the incorporation of RDFs in PHMA and IHMA (p. 2-33) but did not consider the application of RDFs as best management practices (BMPs) in GHMA.</p> <p>The Proposed Plan in the 2015 Final EIS considered closures or limitations on mineral materials development in PHMA and IHMA (p. 2-54); however, it did not consider GMHA open to mineral materials development, subject to BMPs.</p> <p>The Proposed Plan in the 2015 Final EIS considered closures or limitations on leasing within known phosphate leasing areas (p. 2-55); however, it did not consider GMHA open prospecting and subsequent leasing, subject to BMPs.</p> <p>Alternative E in the 2015 Final EIS considered the management of new ROWs in GHMA for utility-scale energy developments without RDFs or BMPs (p. 2-176).</p> <p>Management of new ROWs in GHMA subject to BMPs was not analyzed in 2015.</p>
Modifying habitat objectives	All action alternatives considered the application of habitat objectives as informative metrics but not as land health standards.
Modifying decisions for livestock grazing commensurate with the threat posed	<p>The prioritization of review and processing of grazing permits/leases based on land health conditions or concerns in PHMA and IHMA was not considered in 2015.</p> <p>The prioritization of HMAs for rangeland health assessments with known land health issues or where local populations of Greater Sage-Grouse are in decline was not considered in 2015.</p>

Table 4-3
Consideration of Management Alignment Alternative Components in the 2015 Final EIS

Management Alignment Alternative	Considered in 2015
Modifying the mitigation strategy to align with the state mitigation strategy, including standard for no net loss	<p>Alternative D in the 2015 Final EIS considered the application of a no net loss mitigation standard.</p> <p>Alternative E in the 2015 Final EIS considered not acquiring habitat or generally retaining habitat within PHMA and IHMA.</p> <p>Alternative E in the 2015 Final EIS considered the development of an in lieu fee mitigation program.</p> <p>The Proposed Plan in the 2015 Final EIS considered the application of a mitigation hierarchy for fluid mineral development (pg. 2-51) but not its inapplicability to GHMA.</p>

4.4 IMPACTS OF NO-ACTION ALTERNATIVE

The impacts of the No-Action Alternative, or current management, of this RMPA/EIS were analyzed as Proposed Plan in the 2015 Final EIS; therefore, impacts from implementing the No-Action Alternative are the same as those analyzed in the 2015 Final EIS. As Stated in the Final EIS “The Proposed Plan would provide a higher level of Greater Sage-Grouse habitat protection compared to current management, while allowing flexibility for resource uses when there would be no impacts to Greater Sage-Grouse (Section 5.1.11).”

4.5 IMPACTS OF MANAGEMENT ALIGNMENT ALTERNATIVE

This section focuses on the specific changes being proposed in the Management Alignment Alternative, compares each proposal to the No Action Alternative, and discusses the specific impacts of that change. This section is organized by issue and by the specific decisions identified for change.

I. Modifying Habitat Designations

MD SSS 6: Habitat conditions and our understanding of Greater Sage-Grouse can change over time as new science emerges and the climate changes; therefore, it may be necessary to modify habitat boundaries and designations within Idaho. To effectively respond to changes, the BLM and cooperating agencies have developed a two-team approach, detailed in the management alignment alternative, that would become Appendix K. The process and sideboards identified in the two-team approach should reduce the risk of habitat adjustments being made that disregard the science and the needs of Greater Sage-Grouse.

If HMA habitat boundary changes were more than minor mapping error fixes, then determining the environmental consequences would not be determined at this time. This is because the context and intensity of the effects are unknown. Impacts should be further assessed at the time a change to the habitat management areas is proposed. The BLM anticipates that any impact resulting from a change in map boundaries would be consistent with those described in 2015.

MD SSS 9: Removal of the requirement to apply RDFs and buffers in existing Greater Sage-Grouse habitat outside of designated habitat management areas would reduce protections to

Greater Sage-Grouse and its habitat; however, PHMA and IHMA designations were designed to protect approximately 90 percent of occupied Greater Sage-Grouse leks. Approximately 6 percent of occupied leks occur within GHMA. This leaves approximately 2 percent of occupied leks occurring outside of designated Greater Sage-Grouse habitat. Approximately 377,347 acres of key habitat were identified outside of designated habitats in 2017 and 27 occupied leks are known to occur outside of designated habitat management areas. These areas are typically more scattered and of lower quality than even GHMA. This suggests that a very small portion of Greater Sage-Grouse habitat in Idaho would be not be actively managed for Greater Sage-Grouse. Discrete developments would require site specific NEPA analysis and at a minimum would require avoidance and minimization measures to ensure no undue or unnecessary degradation. For more diffuse land uses, the Idaho Standards for Rangeland Health would still be applied. This action is not expected to have any measurable population level effects to Greater Sage-Grouse in Idaho.

The changes in designated habitat management area boundaries proposed in this document fix minor errors in the 2015 maps and remove some areas of non-habitat that were added to PHMA as part of the SFA designation, but do not benefit Greater Sage-Grouse (e.g., the forested portion of the Donkey Hills ACEC). These changes should have no impact to Greater Sage-Grouse conservation. Changing the Brown's Creek Area from PHMA to IHMA would not reduce protections in this area for the next 5-20 years. Currently all IHMA in the West Owyhee Conservation area is being managed as PHMA because of the hard trigger trip from the Soda Fire. These areas would be managed as PHMA until the habitat returns to the 2011 baseline (this could be 20 or more years). So effectively, this change has no impact. The Browns Creek area includes two lek routes that could be used to monitor the population changes within IHMA in the West Owyhee Conservation Area which currently does not have a lek route. This ability to track population changes within IHMA in this Conservation area would allow for full implementation of the adaptive management process. Currently a population trigger cannot be assessed in the IHMA in the West Owyhee Conservation Area because there is inadequate data. Adding these two lek routes would provide adequate data to fully implement the population trigger review.

New* MD SSS 44: Both alternatives include the use of interagency teams to facilitate responsible management flexibility regarding Greater Sage-Grouse habitat. The 2015 ROD/ARMPA and the Management Alignment Alternative refer to these teams using several different names, but the intent was similar. MD SSS 44 serves to formally identify this two-team interagency approach and the Appendix K describes the responsibilities and sideboards for the actions these teams would take. This approach is expected to improve the consistency of Greater Sage-Grouse management across property ownership and improve interagency coordination and collaboration in Idaho. Overall this approach is expected to improve Greater Sage-Grouse management above what BLM could do alone. The makeup of the teams and the sideboards identified should help ensure responsible implementation of the flexibility that the Management Alignment Alternative allows.

2. Removing Sagebrush Focal Area Designation

MD SSS 10, MD MR 10, MD WHB 3-6: SFAs are a subset of PHMA and are managed as PHMA with some additional management, however that additional management overlaps significantly with management of PHMA. The proposed mineral withdrawal was canceled with a Notice of Cancellation published in the Federal Register on October 11, 2017. Both SFA and PHMA are managed as NSO for fluid Mineral leasing, the only difference is that PHMA allows for a limited exception and the exceptions must meet a stringent series of criteria to be approved as described in MD MR 3. Finally, both SFA and PHMA are the top two priorities for vegetative treatments, permit renewals, monitoring, and compliance checks. The removal of SFA designations would have no measurable effect on the conservation of Greater Sage-Grouse in Idaho because the Management Direction proposed for PHMA would remain in place and continue to protect Greater Sage-Grouse habitat. SFA removal would add flexibility for responsible development with stringent requirements including mitigation to achieve a no net loss to Greater Sage-Grouse habitat in PHMA.

3. Modifying Disturbance and Density Caps

MD SSS 27: Removal of the 3 percent project level disturbance cap would allow BLM to intentionally cluster developments within areas already degraded by discrete anthropogenic activities in Greater Sage-Grouse habitat as long as the overall disturbance within the BSU remains below 3 percent. The 3 percent project scale disturbance cap has the potential to spread development into undeveloped areas of Greater Sage-Grouse habitat just to avoid reaching the 3 percent project scale disturbance cap in already fragmented areas. All 8 BSUs in Idaho are well under the 3 percent BSU scale Disturbance Cap (most are less than 1 percent) and are expected to remain low because of the no-net-loss mitigation standard and the other restrictions to development in PHMA and IHMA. Some areas, especially those with existing development, may be further developed even though compensatory mitigation would offset those impacts for the statewide Greater Sage-Grouse habitat.

Most development is centered along population centers in Idaho and most Greater Sage-Grouse habitat is located away from habitat. This reduces the current potential for development related habitat loss or disturbance but as Idaho's population continues to grow, development in the future may be pushed more and more into Greater Sage-Grouse habitat. Idaho issued a total of 123 new ROWs since the 2015 ROD/ARMPA was implemented. Most of these ROWs were for small scale projects like power line adjustments or access roads that disturb very few acres and are outside of Greater Sage-Grouse HMAs.

Removal of the one energy or mining facility per 640 acres on average density cap would have little effect on Greater Sage-Grouse conservation in PHMA in Idaho because Idaho has limited energy or mining development in Sage-grouse habitat. To date BLM Idaho only has one producing natural gas well that is associated with a BLM lease. The well is located on private land but is drawing from gas reserves partially on federal mineral rights. There is also one oil and gas lease proposed in the Pocatello Field Office in Southeastern Idaho. The Pocatello Proposed RMP EIS describes the proposed lease area as having a high potential for occurrence of oil and gas resources, but describes the potential for oil and gas development such as drilling and completion of wells for fluid minerals production as low (USDOI BLM, 2010). This is due to the

highly complex geology and to the fact that, despite the drilling of numerous exploration wells, there are no producing oil and gas wells or fields within the BLM Pocatello Field Office administrative boundary. The lease nomination area occurs within a geologic province called the Wyoming Thrust Belt Province. The Wyoming Thrust Belt was developed by east-directed compression during the Late Jurassic to Late Cretaceous Sevier Orogeny which resulted in a series of highly folded and faulted stacked thrust sheets that are progressively younger in age to the east. Major thrust faults in the Wyoming Thrust Belt Province include the Paris-Willard, Meade, Crawford, Absaroka, Hogsback-Darby, and Prospect. Thrust loading and structural deformation in the Wyoming Thrust Belt has resulted in a complex evolution of petroleum systems making exploration difficult and limiting drilling success (USDOI USGS, 2017).

Two recent wildcat wells have been drilled on lands in close proximity to the lease sale and have been drilled to depths at approximately 7000 feet targeting the Jurassic Stump – Preuss Sandstone. The CPC 17-1 Well was drilled in 2007 within Township 3 South, Range 43 East, Boise Meridian, NWSW of Section 17 and the Federal 20-3 Well was drilled in 2017 within Township 3 South, Range 43 East, Boise Meridian, S $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 20. Neither of the wells resulted in the discovery of an oil or gas resource, and were plugged and abandoned following drilling.

Based on the area's geology, the lack of access to some of the tracts in the parcel, and the steep topography of the individual tracts that comprise the parcel, combined with the exploration history of the area, BLM concludes it is reasonably foreseeable that, if the lease is sold, only one wildcat well would be drilled within the lease area. The well is unlikely to be productive, and would be plugged and abandoned after testing. The estimated surface disturbance, from well pad and access road construction, would be approximately 14 acres.

This proposed disturbance caps is unlikely to impact Oil and Gas Development in Idaho unless significant oil gas resources were discovered within Idaho which appears unlikely.

Additionally, there are restrictions on where and how energy facilities and salable mineral mining facilities are developed in PHMA and IHMA as well as requirements for offsetting impacts through mitigation to achieve a no net loss to Greater Sage-Grouse. The 2015 ROD/ARMPA's density cap did not apply to locatable minerals development, which is authorized under the Mining Law of 1872.

Appendix E: Removal of extraneous portions of Appendix E as described in **Chapter 2** would not have any impact on Greater Sage-Grouse conservation or on development in Idaho above what is described in MD SSS 27 above.

4. Modifying Lek Buffers

MD SSS 35: Lek Buffers would remain the same in PHMA, which includes approximately 67 percent of the known occupied leks. There would be no effect to Greater Sage-Grouse in PHMA.

IHMA, which has approximately 25 percent (279) of the known occupied leks, would use the USGS Literature Minimum Buffers which are smaller than the buffers identified for use in the

2015 ROD/ARMPA. Little IHMA would be protected by the proposed buffers (Maximum of 25 percent for the largest buffer). Other restrictions in IHMA such as RDFs, Mitigation, Disturbance cap, and NSO with limited exception would serve to ensure responsible development; however, infrastructure and development would be allowed much closer to leks, subject to the before mentioned restrictions. The energy and infrastructure development threat to Greater Sage-Grouse habitat loss is inconsequential in Idaho when compared to the wildfire and invasive species threat. There is very little new development of energy and infrastructure in PHMA or IHMA. The reduction of buffers in IHMA would not result in increased development around every or even most leks because disturbance in BLM HMAs is limited and not the major threat to Greater Sage-Grouse habitat, however where development occurs nearer than the buffers identified in the No Action those leks would be at an increased risk of being abandoned.

Removing the lek buffers in GHMA would affect approximately 6 percent (approximately 62) of the known occupied leks in Idaho. These leks are scattered across almost 2 million acres of GHMA. The currently implemented buffers protect a maximum of 261,683 (approximately 13 percent) acres of GHMA from certain types of development. On a project specific basis BLM would continue to avoid and minimize impacts to the extent practicable within GHMA. Removing buffers from GHMA should encourage development outside of PHMA or IHMA but only a maximum of 13 percent of GHMA was unavailable for development based on the largest buffers in the 2015 ARMPA. This represents a very small percentage of the total Greater Sage-Grouse habitat in Idaho. As mentioned above GHMA is of lower quality or connectivity when compared to PHMA and IHMA.

The reduced buffer distance in IHMA and the removal of buffers in GHMA would improve alignment with the Governor's Plan by having the most restrictive management in PHMA and reducing those restrictions in IHMA and further reducing restrictions in GHMA. As can be seen in **Table 4-4** below, the amount of habitat protected under the buffers in the Management Alignment Alternative is lower compared to the No Action Alternative.

Appendix B: Changes to Appendix B reflect the changes made in MD SSS 35. No additional impacts above what is described in this section are anticipated.

Table 4-4 displays the proposed buffers for each alternative along with the percent of the respective habitat protected by each buffer. Percentages have been rounded to the nearest whole percent for simplicity. Total Public Land acres for each designated habitat type are shown.

Table 4-4
Habitat Protected by Lek Buffers

Action	PHMA (4,177,624 acres)		IHMA (2,675,251 acres)		GHMA (1,956,451 acres)	
	Buffer	Percent Protected	Buffer	Percent Protected	Buffer	Percent Protected
No Action Alternative						
Linear Features (roads)	3.1 Miles	71	3.1 Miles	47	3.1 Miles	13
Infrastructure Related to Energy Development	3.1 Miles	71	3.1 Miles	47	3.1 Miles	13
Tall Structures	2 Miles	47	2 Miles	27	2 Miles	5

**Table 4-4
Habitat Protected by Lek Buffers**

Action	PHMA (4,177,624 acres)		IHMA (2,675,251 acres)		GHMA (1,956,451 acres)	
	Buffer	Percent Protected	Buffer	Percent Protected	Buffer	Percent Protected
Low Structures	1.2 Miles	24	1.2 Miles	13	1.2 Miles	2
Surface Disturbance	3.1 Miles	71	3.1 Miles	47	3.1 Miles	13
Noise and Disruptive Activities	0.25 Miles	1	0.25 Miles	1	0.25 Miles	0
Management Alignment Alternative						
Linear Features (roads)	3.1 Miles	71	0.25 Miles	1	No Buffer	0
Infrastructure Related to Energy Development	3.1 Miles	71	2 Miles	27	No Buffer	0
Tall Structures	2 Miles	47	0.6 Miles	4	No Buffer	0
Low Structures	1.2 Miles	24	0.12 Miles	0	No Buffer	0
Surface Disturbance	3.1 Miles	71	2 Miles	27	No Buffer	0
Noise and Disruptive Activities	0.25 Miles	1	0.25 Miles	1	No Buffer	0

5. Including Waivers, Exceptions and Modification on NSO Stipulations

MD MR 1: The removal of the SFA designation would leave those lands with the protections of PHMA. Idaho has very little fluid mineral leasing potential with only one producing oil and gas well and one proposed lease in the state. Idaho has only a couple of operating geothermal energy developments. The change from NSO with no exception to NSO with limited exception should not result in increased habitat loss or degradation because the proposed exception criteria and screening and development criteria require offsetting impacts to achieve a no net loss to Greater Sage-Grouse or its habitat. The limited exception would allow BLM to develop fluid mineral leases in PHMA under limited situations consistent with its multiple use mandate.

MD MR 2: The analysis of removal of requirements to use buffers and RDFs in GHMA is found in this section under numbers 4. Modifying Lek Buffers and 6. Changing Requirements for Design Features.

MD MR 3: The analysis of removal of requirement for a net conservation gain is found in this section under 9. Modifying the Mitigation Strategy to Align with the State Mitigation Strategy. The removal of the requirement for a unanimous finding between BLM, FWS, and the State of Idaho to grant an exception for NSO in fluid minerals development would be replaced with coordination with the technical and policy team, which would include both FWS and the State of Idaho, and would still be required under the process described in MD SSS 44. This change is expected to facilitate improved decision making and a more collaborative process for Greater Sage-Grouse management in Idaho while retaining BLM's decision-making authority.

MD MR 8: This management decision is redundant with MD MR 4 which is not proposed for change. This deletion would have no effect on Greater Sage-Grouse management but would reduce redundancy within the plan.

6. Changing Required Design Features (RDFs)

MD SSS 32, MD MR 12, MD RE 1, MD LR 2: Applicable RDFs would continue to be required in PHMA and IHMA as described in Appendix C of the Plan, however RDFs would be treated as best management practices in GHMA. This would provide a little more flexibility for each field office to consider and select the appropriate BMPs for project authorizations in GHMA. This may result in reduced consistency between projects on which BMPs would be implemented in GHMA. On a project specific basis BLM would continue to avoid and minimize impacts to the extent practicable within GHMA. The analysis of removal of requirements to use buffers in GHMA is found in this section under *4. Modifying Lek Buffers*.

Appendix C would be reorganized to facilitate easier use of the RDFs in projects. It has been reorganized to better reflect those RDFs that are generally applicable to most or all projects and those that generally apply only to specific projects. It also identifies where an RDF offers several options to achieve a certain outcome. This change is expected to reduce confusion and facilitate more effective implementation of the RDFs.

7. Modifying Habitat Objectives

SSS OBJ 2: The added language only helps to clarify the appropriate context for using the Habitat Objectives in Table 2.2 of the 2015 Final EIS. This change should have no measurable impact on Greater Sage-Grouse conservation but should increase consistency in how Table 2.2 is applied across Idaho.

Adequate residual grass cover: Greater Sage-Grouse require adequate cover to conceal their nests and their movements near the nest. The amount and type of concealment varies, depending on the makeup of the nest site. Areas with densely branched sagebrush and abundant tall statured forbs may not need as much grass cover as areas with sparser sagebrush and low growing forbs. Connelly et al. (2000) recommends that Greater Sage-Grouse habitat be managed to ensure a healthy herbaceous understory that is at least 7 inches in height when chicks are hatching during the nesting season. Holloran et al. (2005) suggest that at least 4 inches of residual grass height is important for successful Greater Sage-Grouse nests. Seven inches is not a threshold where Greater Sage-Grouse nesting success suddenly disappears. Multiple studies have found successful Greater Sage-Grouse nests in areas that averaged less than 7 inches of herbaceous cover (Connelly et al. 2000). Areas with taller or columnar sagebrush or areas with less sagebrush may require grass heights taller than 7 inches in order to provide adequate cover (Connelly et al. 2000).

The predator community makeup of an area may also influence what type of cover is necessary to conceal nests. Greater Sage-Grouse nesting in areas with a low concentration of ravens may require less overhead cover to allow a successful nest, compared with Greater Sage-Grouse nesting in areas with a high concentration of ravens; therefore, the focus is to develop a healthy and vigorous herbaceous understory that is capable of reproducing and maintaining itself on the landscape. The goal is to improve vigor, allow for reproduction and establishment, ensure properly functioning ecosystems, and then let Greater Sage-Grouse select suitable nesting habitats within those ecosystems.

Some ecological sites are not capable of consistently providing 7 or more inches of perennial grass height as concealment. In those areas, if Greater Sage-Grouse choose to nest there, they would have to rely on other types of concealment cover for their nests.

VEG OBJ 3: This MD is redundant with OBJ SSS 1 and so its deletion would not affect Greater Sage-Grouse conservation but would reduce redundancy in the 2015 Final EIS.

8. Modifying Decisions for Livestock Grazing Commensurate with Threat Posed.

MD LG 15, MD LG 17, MD WHB 2: Modifying the prioritization criteria for permit renewals, monitoring, and compliance helps the BLM focus on areas with current land health issues, instead of potentially spending extra time on areas that are in good condition at the expense of areas that have problems. This change is in line with current BLM policy and therefore would not have a measurable impact on Greater Sage-Grouse management.

MD LG 16: Removing the requirement to consider thresholds and responses during every grazing permit renewals in PHMA would reduce the BLM's NEPA process time by several days. This would be a minimal savings, given that most grazing permit renewal processes take multiple years to complete. The 2015 Final EIS had no requirement for the BLM to select the threshold and response alternative, only to consider it. Additionally, the BLM Grazing Regulations (CFR 4100) provide authority for the BLM to take the appropriate action, which at times may include thresholds and responses; therefore, this change would have no measurable impact on Greater Sage-Grouse conservation or on livestock grazing management.

9. Modifying Mitigation Strategy to Align with the State Mitigation Strategy Including Standards for No Net Loss.

MD MT 3, MD SSS 30, MD LR 14, MD MR 2, MD REC 2: Changing the mitigation standard from a "Net Conservation Gain" to a "No Net Loss" standard would reduce the amount of habitat that would be restored, improved, or protected by the difference between a net gain and a no net loss. This difference has not been defined by the BLM and has varied, based on the proponent's willingness to provide mitigation beyond the minimal net gain standard. Proponents would continue to vary in their willingness to provide mitigation that goes beyond the no net loss standard.

Under either standard, the BLM is ensuring that development projects would not result in a net harm to Greater Sage-Grouse or its habitat. This change would not result in a net loss of current Greater Sage-Grouse habitat; however, a future benefit, based on compensatory mitigation, would not be realized above and beyond current condition.

It is not possible to state how much benefit would be derived from the net conservation gain standard for Greater Sage-Grouse or its habitat. The 2015 Final EIS continues to require extensive vegetation treatment to restore Greater Sage-Grouse habitat. Compensatory mitigation would continue to occur in PHMA and IHMA, which would be additive to the ongoing vegetative treatments.

Since the Final EIS was implemented in 2015, there have been six non-BLM projects subject to the plan that were approved on BLM-administered land. These would result in new habitat loss and degradation of designated Greater Sage-Grouse habitat. These projects had a total of approximately 22 functional acres of new disturbance.

Additionally, there were two large-scale transmission line projects that were specifically exempted from the 2015 Final EIS: Gateway West and Boardman to Hemingway. These two projects would disturb many more functional acres than the other projects combined, but the total calculations for functional acres have not been completed.

Idaho has very few of these large-scale projects occurring each year, and the six projects with new habitat loss in a 2-year period with periodic large-scale projects is likely similar to what would be expected in the future. The acres of habitat not restored because of the reduction in the mitigation standard from net gain to no net loss would be much less than one percent of the vegetation treatments completed each year.

Mitigation would not be required in GHMA, and a primary goal of the Governor's Greater Sage-Grouse plan is to push development out of PHMA and IHMA into GHMA or outside of habitat; therefore, Greater Sage-Grouse in GHMA or outside designated habitat would be at increased risk of habitat loss or displacement; however, this area typically contains lower quality or marginal Greater Sage-Grouse habitat.

The BLM would continue to avoid and minimize impacts in GHMA, but there would be loss and degradation of habitat. This change would encourage proponents to develop in GHMA or outside of Greater Sage-Grouse habitat. This is because it would be less expensive but unlikely to spur a boom of development in GHMA. Six percent of occupied leks in Idaho would be at an increased risk of loss and degradation.

10. Refining Adaptive Management Strategy

MD SSS 15: This change of analyzing the trigger data from twice a year to once a year clarifies that, although there are two different types of adaptive management data collected each year, they are most effectively analyzed at the same time. This would have no measurable effect on Greater Sage-Grouse conservation.

MD SSS 24: This clarifies that actions recommended by the technical and policy teams may have a different time frame or applicable area from the automatic hard trigger responses. No effect to Greater Sage-Grouse conservation is expected.

MD SSS 20: Under the No-Action Alternative, significance is set at the 90 percent confidence interval for both hard and soft population triggers; however, changing the soft trigger to an 80 percent confidence interval would provide the technical and policy teams with an early warning of potential problems and would allow a timely response to prevent a hard trigger trip. This would allow the BLM and the State of Idaho with their partners to do a causal factor analysis and recommend actions to prevent further declines and potential hard trigger trips. This may not make a measurable change in Greater Sage-Grouse conservation, but it would facilitate earlier warning of potential problems.

11. Salable Minerals

MD MR 11: The language in the 2015 Final EIS caused confusion, and this change helps to clarify management around mineral materials in PHMA. No new commercial pits would be allowed, but continued use of existing pits would be allowed. Free-use permits are offered to counties to help maintain county roads. New free-use pits and expansion of existing pits would be allowed only under limited conditions in PHMA. Buffers, RDFs, and a no net loss mitigation standards would apply. This would reduce the counties' costs of hauling gravel, but the restrictions and mitigation should continue to protect Greater Sage-Grouse habitat.

Since the 2015 Final EIS was implemented, Idaho has authorized only four salable mineral projects in the entire state inside and outside of Greater Sage-Grouse habitat. All four of these gravel pit authorizations were for county free-use permits that provide gravel to the counties to maintain county roads. Salable minerals development does remove Greater Sage-Grouse habitat. Most pits in Greater Sage-Grouse habitat in Idaho are free-use pits that tend to be fairly small (compared with commercial pits) and are only periodically active.

According to the 2015 Final EIS, there were 120 salable minerals sites on public land in Idaho, and most gravel pits ranged from 5 to 15 acres (Section 3.12.1). Based on those numbers, there is a maximum of 1,800 acres of Greater Sage-Grouse habitat currently lost due to gravel pits on public land. If the number of gravel pits doubled in the next 20 years there would still be only 3,600 acres, or 0.041 percent, of Greater Sage-Grouse habitat lost to gravel pits. Given the recent rate of development, it is unlikely that gravel pits would double in 20 years within Greater Sage-Grouse habitat in Idaho. The effects on Greater Sage-Grouse would be negligible.

As only four new free-use authorizations have been issued since 2015 in all of Idaho, allowing limited exceptions within PHMA would have little or no measurable effect on Greater Sage-Grouse conservation. The analysis of removal of requirements to use buffers in GHMA is found in 4, *Modifying Lek Buffers*.

4.6 CUMULATIVE EFFECTS ANALYSIS

This section presents the anticipated cumulative impacts on the environment from implementing the alternatives presented in **Chapter 2**. A cumulative impact is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions.

Cumulative impacts can result from individually minor but collectively significant actions taking place over time. The cumulative impacts resulting from the implementation of the RMP decisions in this RMPA/EIS may be influenced by other actions, as well as activities and conditions on other public and private lands, including those beyond the planning area boundary. These include the concurrent Forest Service planning to amend land management plans for National Forests in Idaho, Montana, Nevada, Utah, Colorado, and Wyoming. These plans were previously amended in September 2015 to incorporate conservation measures to support the continued existence of the Greater Sage-Grouse. As a result, the sum of the effects of these incremental impacts involves determinations that often are complex, limited by the availability of information, and, to some degree, subjective.

This RMPA/EIS incorporates by reference the analysis in the 2015 Final EIS. It comprehensively analyzed the cumulative impacts associated with the planning decisions under consideration in that process, including the impacts associated with what became the selected alternative in the 2015 ROD.

The 2015 Final EIS evaluated the cumulative impacts associated with the No-Action Alternative in this RMPA/EIS, as well as the cumulative impacts associated with this RMPA/EIS's Management Alignment Alternative. These impacts are composed of planning decisions evaluated in the 2015 Final EIS.

Including the six state-wide BLM RMPA/EISs occurring in the Greater Sage-Grouse range and similar plan amendment efforts being undertaken by the Forest Service, the Management Alignment Alternative's effects, including its cumulative effects, are almost entirely within the range of effects analyzed in the 2015 Final EIS.

While the analysis for the 2015 Final EIS is quite recent, the BLM has reviewed conditions in Idaho to verify that they have not changed significantly. The BLM's assessment that science related to Greater Sage-Grouse and current conditions have not changed significantly is based, in part, on the USGS science review (see **Chapter 3**). It is also based on the BLM's review of additional past, present, and reasonably foreseeable actions in 2018. Since the nature and context of the cumulative effects scenario has not appreciably changed since 2015, and the 2015 analysis covered the entire range of the Greater Sage-Grouse, the cumulative effects analysis in the 2015 Final EIS applies to this planning effort and provides a foundation for the BLM to identify any additional cumulative impacts.

Unless otherwise addressed in this chapter, the cumulative effects of the alternatives analyzed in this RMPA/EIS are covered by the 2015 Final EIS. This includes the incremental impacts across the range of BLM-administered lands and Forest Service lands being amended in concurrent plan amendments. See **Table 4-5** for additional cumulative actions not analyzed in the 2015 Final EIS.

Table 4-5
Cumulative Effects Analysis Incorporated by Reference

Decision Topic	Related Resource Topic	2015 Final EIS, Chapter 5, Locations of Cumulative Effects Analysis
Modifying habitat management area boundaries	Greater Sage-Grouse	Section 5.1; pgs. 1–87
Removing SFA designations	Greater Sage-Grouse	Section 5.1; pgs. 1–87
	Minerals and Energy	Section 5.3.7; pgs. 168–170 Section 5.3.8; pgs. 170–171 Section 5.3.9; pgs. 171–172
	Livestock Grazing	Section 5.3.4; pgs. 162–164
	Wild Horse and Burro	Section 5.3.2; pgs. 159–160
	Greater Sage-Grouse	Section 5.1; pgs. 1–87
Adjusting disturbance and density caps	Minerals and Energy	Section 5.3.7; pgs. 168–170 Section 5.3.8; pgs. 170–171 Section 5.3.9; pgs. 171–172
	Socioeconomics	Section 5.3.13; pgs. 174–177
	Lands and Realty	Section 5.3.6; pgs. 165–168

Table 4-5
Cumulative Effects Analysis Incorporated by Reference

Decision Topic	Related Resource Topic	2015 Final EIS, Chapter 5, Locations of Cumulative Effects Analysis
Modifying lek buffers	Greater Sage-Grouse	Section 5.1; pgs. 1–87
	Minerals and Energy	Section 5.3.7; pgs. 168–170 Section 5.3.8; pgs. 170–171 Section 5.3.9; pgs. 171–172
	Socioeconomics	Section 5.3.13; pgs. 174–177
	Lands and Realty	Section 5.3.6; pgs. 165–168
	Livestock Grazing	Section 5.3.4; pgs. 162–164
	Recreation	Section 5.3.5; pgs. 164–165
Including waivers, exceptions, and modifications on NSO stipulations	Greater Sage-Grouse	Section 5.1; pgs. 1–87
	Minerals and Energy	Section 5.3.7; pgs. 168–170 Section 5.3.8; pgs. 170–171 Section 5.3.9; pgs. 171–172
Changing requirements for design features	Greater Sage-Grouse	Section 5.1; pgs. 1–87
	Land Use and Realty	Section 5.3.6; pgs. 165–168
	Minerals and Energy	Section 5.3.7; pgs. 168–170 Section 5.3.8; pgs. 170–171 Section 5.3.9; pgs. 171–172
	Socioeconomics	Section 5.3.13; pgs. 174–177
	Livestock Grazing	Section 5.3.4; pgs. 162–164
Modifying habitat objectives	Greater Sage-Grouse	Section 5.1; pgs. 1–87
Modifying decisions for livestock grazing commensurate with the threat posed	Greater Sage-Grouse	Section 5.1; pgs. 1–87
	Livestock Grazing	Section 5.3.4; pgs. 162–164
Modifying the mitigation strategy to align with the state mitigation strategy, including standard for no net loss	Greater Sage-Grouse	Section 5.1; pgs. 1–87
	Socioeconomics	Section 5.3.13; pgs. 174–177
	Livestock Grazing	Section 5.3.4; pgs. 162–164
	Minerals and Energy	Section 5.3.7; pgs. 168–170 Section 5.3.8; pgs. 170–171 Section 5.3.9; pgs. 171–172
	Land Use and Realty	Section 5.3.6; pgs. 165–168
	Recreation	Section 5.3.5; pgs. 164–165

In addition to the analysis in the 2015 Final EIS (Chapter 5, Cumulative Impacts) in Tables 5-24, 5-25, and 5-26 (pgs. 88–154), other anticipated incremental impacts are discussed below in association with planning issues being analyzed in this RMPA/EIS.

The 2015 Final EIS analyzed the cumulative impacts of the No-Action Alternative and the Governor's Alternative. The Management Alignment Alternative's effects are entirely within the range of effects of these two alternatives. The 2015 Final EIS is quite recent and the science and conditions in Idaho have not changed significantly, based on the USGS science review and current conditions described in **Chapter 3**. Because of this, the cumulative effects analysis in the 2015 Final EIS is still applicable. The range-wide and plan-specific cumulative effects analyses from the 2015 Final EIS is hereby incorporated by reference into this RMPA/EIS (2015 Final EIS Chapter 5).

The past, present, and reasonably foreseeable future actions are contained in the combination of the 2015 Final EIS and **Chapter 3** of this RMPA/EIS. Conditions on public land have changed little since the

2015 Final EIS and the projections that were made regarding reasonably foreseeable future actions remain valid. Additionally, changes that have occurred on a smaller level, such as those from the Soda Fire, were promptly responded to, according to the 2015 Final EIS. All IHMA within the West Owyhee Conservation Area is now managed as PHMA until the habitat returns to the 2011 baseline level. Because of the adaptive nature of the 2015 Final EIS, the cumulative effects analysis continues to be applicable today (see **Table 4-6**, below, for a list of past, present, and reasonably foreseeable actions occurring at the local scale in the Idaho planning area).

Under the Management Alignment Alternative, SFAs would be removed from the plan, including the recommendation to withdraw SFAs from location and entry under the Mining Law. On October 11, 2017, the BLM canceled its withdrawal application (82 *Federal Register* 47248), because the agency determined that future mining is not a significant threat to Greater Sage-Grouse habitat, thereby negating the need for the withdrawal. Beyond the recommended withdrawal, designation of SFA is not associated with any other land use allocations; therefore, in the absence of the application for the mineral withdrawal, there would be no impact from the removal of the SFA designation under either alternative and therefore, by definition, no cumulative effect.

Two types of impacts were identified from the Management Alignment Alternative: a reduction in protections for Greater Sage-Grouse habitat and an increase in flexibility for other uses within Greater Sage-Grouse habitat. While not every specific change proposed in the Management Alignment Alternative was highlighted and examined for its individual effects in the 2015 Final EIS, the range of protections and flexibility was definitely analyzed among the alternatives.

The increased flexibility would allow for responsible development of other uses in Greater Sage-Grouse habitat. It could reduce costs to proponents but is not expected to result in a flood of development proposals on public land. The increased protections from the 2015 Final EIS have not resulted in a large decrease in ROW applications or an increase in rejected applications; therefore, the changes proposed under the action alternatives are not expected to result in any changes to the rate of development in Idaho or in its economy.

Some 350 species rely on sagebrush steppe ecosystems, coexist with Greater Sage-Grouse, and may be similarly affected by development or disturbance. Nothing in the considered alternatives would lessen the BLM's authority nor responsibility to provide for the needs of special status species, as described in BLM land use plans, policies, and laws, including Manual 6840, the Endangered Species Act, and FLPMA.

Increased flexibility for other uses within Greater Sage-Grouse habitat does not necessarily increase potential impacts on other wildlife or plant species. A site-Specific NEPA analysis, including an evaluation of impacts on special status species, is required for on-the-ground projects within the planning area.

Table 4-6 represents the past, present, and reasonably foreseeable actions across the entire range for Greater Sage-Grouse, which are separated by state. When assessing the cumulative impact of the RMPA/EIS on Greater Sage-Grouse and its habitat, there are multiple geographic scales that the BLM has considered, including the appropriate WAFWA management zone. WAFWA Management Zones have biological significance to Greater Sage-Grouse. Established and delineated in 2004 in the *Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats* (Connelly et al. 2004), the WAFWA management zones are based on floristic provinces that reflect ecological and biological issues and similarities, not political boundaries.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Great Basin		
Habitat Restoration Programmatic EIS	Great Basin-wide programmatic habitat restoration project	Programmatic document effects will be realized when the field implements projects. This action will provide opportunities to improve and enhance habitat through vegetation treatments.
Fuel Breaks Programmatic EIS	Great Basin-wide programmatic habitat fuel break project	Programmatic document effects will be realized when the field implements projects. This action will help to reduce the loss of habitat due to catastrophic fires.
Northwest Colorado		
Integrated program of work	Habitat restoration and improvement projects	Potential localized, short-term, adverse impacts on Greater Sage-Grouse habitat, with beneficial long-term impacts. Actions are consistent with those foreseen in the 2015 Final EIS and are therefore within the range of cumulative effects analyzed in the 2015 Final EIS.
Travel management	White River Field Office: Area-wide travel designations being considered through an ongoing plan amendment Little Snake Field Office: Travel Management plan, identifying route designations consistent with criteria in the 2015 LUPA	These actions represent implementation of objectives from 2015 ARMPA to prioritize travel management in Greater Sage-Grouse habitat. Impacts are covered in the cumulative impacts of the 2015 Final EIS as reasonably foreseeable.
Continued oil and gas development	Disturbance and fragmentation	Development is consistent with the reasonably foreseeable development scenarios analyzed as part of the 2015 Final EIS and the associated field office RMPs. Additional impacts are expected to be within the range analyzed in 2015 Final EIS cumulative impacts analysis.
<i>Plans</i>		
Northwest Colorado Programmatic Vegetation Treatment Environmental Assessment (DOI-BLM-CO-N000-2017-0001-EA) decision	Programmatic NEPA document for streamlining habitat treatments in sagebrush	
Idaho		
Wildland fires 2015–2017	BLM: Past acres burned on BLM-administered land	534,744 acres of HMA burned since the ROD was signed in 2015. Post-fire rehabilitation was implemented. Too soon to determine the effectiveness of rehabilitation.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Habitat treatments 2015–2017	BLM: Past habitat improvement projects	431,295 acres treated to restore or improve potential Greater Sage-Grouse habitat. Too soon to determine the effectiveness of treatment.
ROWs issued 2015–2017	BLM: Past ROWs issued on BLM-administered land	97 ROWs were issued in the planning area but fewer than 10 were in Greater Sage-Grouse habitat and resulted in new habitat loss. The effects were mitigated, using the mitigation hierarchy.
Soda Fire restoration	BLM: Present habitat restoration and fuel break construction	Restoration of previously burned Greater Sage-Grouse habitat. Results in a net benefit to Greater Sage-Grouse habitat.
Twin Falls Vegetation Project	BLM: Present habitat treatment project that improves Greater Sage-Grouse habitat district-wide	Restoration of Greater Sage-Grouse habitat and improved rangeland conditions. Results in a net benefit to Greater Sage-Grouse habitat.
Idaho Falls Vegetation Project	BLM: Present habitat treatment project that improves Greater Sage-Grouse habitat district-wide	Restoration of Greater Sage-Grouse habitat and improved rangeland conditions. Results in a net benefit to Greater Sage-Grouse habitat.
Natural gas-producing well near Weiser, Idaho	Private: Present active gas well on private land	Well is not in Greater Sage-Grouse habitat.
Conifer removal	NRCS: Present (2018) 1,862 acres of conifer removal on private land to improve Greater Sage-Grouse habitat	Conifer removal would improve Greater Sage-Grouse habitat and open areas to Greater Sage-Grouse that were previously unavailable because of juniper encroachment.
Weed treatments	NRCS: Present (2018) 95 acres of weed treatments on private land to reduce noxious weeds in Greater Sage-Grouse habitat	Weed treatments allow the native vegetation to outcompete weeds on treated acres.
Water development	NRCS: Present (2018) 21,308 feet of pipeline and 40 watering tanks installed on private land	Water development to move livestock out of natural springs and wet meadows.
Pending ROWs 2015–2017	BLM: Future ROW under analysis on BLM-administered land	123 ROW applications have been submitted and are pending review and analysis.
Boise District Vegetation Project	BLM: Future habitat treatment project that improves Greater Sage-Grouse habitat district-wide	Restoration of Greater Sage-Grouse habitat and improved rangeland conditions result in a net benefit to Greater Sage-Grouse habitat.
Tristate Fuel Breaks Project	BLM: Future Greater Sage-Grouse habitat protection	Fuel breaks would protect habitat from wildfires. Some sagebrush may be lost during fuel break construction. Results in a net benefit to Greater Sage-Grouse habitat.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Bruneau-Owyhee Sage-Grouse Habitat Project (BOSH)	BLM: Future removal of juniper encroaching into Greater Sage-Grouse habitat	BOSH would remove encroaching juniper from Greater Sage-Grouse habitat and render the habitat usable for Greater Sage-Grouse. Results in a net benefit to Greater Sage-Grouse habitat.
Conifer removal	NRCS: Future (2019–2023) 5,541 acres of conifer removal on private land to improve Greater Sage-Grouse habitat	Conifer removal would improve Greater Sage-Grouse habitat and open areas to Greater Sage-Grouse that were previously unavailable because of juniper encroachment.
Weed treatments	NRCS: Future (2019–2023) 357 acres of weed treatments on private land to reduce noxious weeds in Greater Sage-Grouse habitat	Weed treatments allow the native vegetation to outcompete weeds on treated acres.
Water development	NRCS: Present (2019–2023) 82,502 feet of pipeline and 46 watering tanks installed on private land	Water development to move livestock out of natural springs and wet meadows
Nevada and Northeast California		
Wildland Fires 2015-2017	BLM: Past – Acres burned on BLM administered land	Approximately 1.3 million acres of HMA burned between 2015-2017. Post fire restoration is being implemented as described below.
Fire Restoration (Emergency Stabilization and Rehabilitation)	BLM: Past and Present – Habitat restoration following wildland fires	1.8 million acres of habitat are either currently being treated or scheduled to be treated according to specific prescriptions outlined in Emergency Stabilization and Burned Area Rehabilitation plans following wildfire.
Habitat Treatments	BLM: Past – Habitat improvement projects	Over 176,000 acres of Greater Sage-Grouse habitat was treated between 2015-2017 to maintain or improve conditions for Greater Sage-Grouse. Treatments included conifer removal, fuel breaks, invasive species removal and habitat protection/restoration.
Land Use and Realty (issued and pending) 2015-2018	BLM: Past ROWs issued on BLM land	227 ROWs were issued in the planning area between 2015-2017. This includes amendments and reauthorizations, which may not have resulted in new disturbance. For ROWs occurring in Greater Sage-Grouse habitat, effects were offset using the mitigation hierarchy.
	BLM: Future pending	85 ROW applications are pending review and analysis. New ROWs would be held to the same mitigation standard under the management alignment alternative as described in the 2015 EIS, so no additional cumulative impacts beyond those described in 2015 are anticipated.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Oil and Gas	BLM: Past	In addition, BLM Nevada is also currently evaluating a proposed withdrawal for expansion of the Fallon Naval Air Station, Fallon Range Training Complex for defense purposes.
	BLM: Future pending	BLM has offered for lease 425,711 acres in HMAs; 407,478 of that total was leased. Lease stipulations apply as described in the leases according to HMA category. BLM has a scheduled lease sale in June 2018 that will offer 110,556 acres in HMAs. Lease stipulations would still be as described in 2015 until a decision is made on this draft.
Geothermal	BLM: Past and Present	Between 2015 and 2017, the BLM has offered for lease 24,468 acres within HMAs. Lease stipulations apply as described in the leases as analyzed in the 2015 Final EIS.
Geothermal	Forest Service: Future Pending	6 geothermal development permits have been approved and drilled on existing pads on existing leases. McGinness Hills Phase 3 EA authorized up to 42 acres of disturbance on existing leases, which will be offset according to the mitigation hierarchy. 6,901 acres of HMA pending forest service concurrence to lease, no pending geothermal development permits. If in HMAs, stipulations would be as described in 2015.
Locatable Mineral Projects	BLM: Past and Present	Between 2015 and 2017, the BLM has approved 18 new mines and/or expansions in the planning area, which is within the reasonably foreseeable development scenario outlined in the 2015 Final EIS (Section 5.1.16).
	BLM: Future Pending	The BLM is currently reviewing 20 plans of development for new mines or expansions, which is within the reasonably foreseeable development scenario outlined in the 2015 Final EIS (Section 5.1.16).
Fuel Breaks PEIS	BLM: Future – Great Basin-wide programmatic habitat fuel break project	Programmatic document effects will be realized when the field implements projects.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Sage-Grouse Conservation	Forest Service- Future	Forest Service has indicated they will also be amending their land use plans. Specific details of their proposed changes are not yet known, but it is anticipated they propose alignment with state management plans and strategies.
Oregon		
Emergency Stabilization and Rehabilitation in South Bull Ridge RNA	Aerial herbicide application	Preliminary results indicate success in treating annual grasses (2017).
Emergency Stabilization and Rehabilitation in South Ridge Bully Creek RNA	Aerial herbicide application	Preliminary results indicate success in treating annual grasses (2015).
Emergency Stabilization and Rehabilitation in North Ridge Bully Creek RNA	Aerial herbicide application	Preliminary results indicate success in treating annual grasses (2015).
Trout Creek Mountain	Grazing permit renewal	Grazing permit renewal allotment includes the East Fork Trout Creek RNA (2016).
Utah		
Fire and Fuels		
Wildland Fires 2015-2017	Acres burned on BLM administered land	Approximately 61,262 acres of PHMA/GHMA burned between 2015-2017. Post fire restoration is being implemented across all population areas that are affected. Effects: Potential loss of habitat value due to the removal of vegetation by fire.
Fire Restoration (Emergency Stabilization and Rehabilitation)	Acres of habitat restoration following wildland fires	Approximately 173,100 acres of HMA were treated/restored between 2015-2017. All of these acres are being restored in according to specific prescriptions outlined in Emergency Stabilization and Burned Area Rehabilitation plans following wildfire across all population areas that are affected. Effect: Potentially improve or increase habitat due to vegetative restoration activities.
Vegetation		
Habitat Treatments	Acres of habitat improvement projects	Past: Over 219,000 acres of Greater Sage-Grouse habitat was treated between 2015-2017 to maintain or improve conditions for Greater Sage-Grouse across all populations. Treatments included conifer removal, fuel breaks, invasive species removal and habitat protection/restoration.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
		<p>Effect: Potentially improve or increase habitat due to vegetative restoration activities.</p> <p>Future: Over 524,702 acres of Greater Sage-Grouse habitat is being proposed for treatment over the next 5 years. Treatments will include conifer removal, fuel breaks, invasive species removal and habitat protection/restoration across all populations.</p> <p>Effect: Potentially improve or increase habitat due to vegetative restoration activities.</p>
Lands and Realty		
Land Use and Realty (issued and pending) 2015-2018	ROWs issued or pending on BLM land	<p>Past: Issued 841 ROWs were issued in the planning area between 2015 and 2017.</p> <p>Effect: This includes amendments and reauthorizations, which may not have resulted in new disturbance. For ROWs occurring in Greater Sage-Grouse habitat, effects were offset using the mitigation hierarchy.</p> <p>Future: 380 ROW applications are pending review and analysis.</p> <p>Effect: New ROWs would be held to the same mitigation standard under the management alignment alternative as described in the 2015 EIS, so no additional cumulative impacts beyond those described in 2015 are anticipated.</p>
Zephyr Transmission Line	500 kV transmission line	<p>Application received – could impact the Bald Hills, Uintah, Carbon, Strawberry, Emery, and Sheeprocks populations.</p> <p>Effects: May remove vegetation due to construction activities. Towers may provide perching opportunities for avian predators. However, most of these impacts should be removed by management standards identified in the selected alternative.</p>

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Parker Knoll Pump Storage Hydroelectric Federal Energy Regulatory Commission Project	Create electricity using a two-reservoir, gravity-fed system; approximately 200 acres of Greater Sage-Grouse habitat would be lost; mitigation involves Greater Sage-Grouse habitat-improvement work in areas adjacent to the lost habitat.	Still in planning and NEPA stages – could impact the Parker Mountain population. Effects: May remove vegetation due to construction activities. Increased maintenance activities could lead to an increase in collision mortalities. Any associated tall structures may provide perching opportunities for avian predators. However, most of these impacts should be removed by management standards identified in the selected alternative.
Enefit Utility Project	Five rights-of-way across public lands for infrastructure (a road, 3 pipelines, and 2 powerlines) to support development of a mine on private lands. Estimated 1,037 acres of disturbance for the rights-of-way (7,000-9,000 acre mine and 320-acre processing plant).	Still in planning and NEPA stages – could impact the Uintah population. Effects: May remove vegetation due to construction activities. Increased maintenance activities could lead to an increase in collision mortalities. Any associated tall structures may provide perching opportunities for avian predators. However, most of these impacts should be removed by management standards identified in the selected alternative.
Leasable Minerals (Oil and Gas, Non-energy Leasable Minerals, Coal, and Oil Shale and Tar Sands)		
Oil and Gas Leases	Acres of BLM land leased for Oil and Gas development	<p>Past: From 2105-2017 the BLM has leased approximately 25,000 acres in HMAs, of which approximately 25 of those acres were located in PHMA. Lease stipulations apply as described in the leases according to HMA category.</p> <p>Effects: The act of leasing would have no direct effect.</p> <p>Future: BLM has a scheduled lease sale in June 2018 that will offer 646 acres in HMAs. Additionally, the BLM is required to conduct quarterly lease sales which could include parcels in HMA. Lease stipulations would still be as described in 2015 until a decision is made on this RMPA/EIS.</p> <p>Effect: The act of leasing would have no direct effect, as no specific disturbance is taken as a result of purchasing a lease.</p>

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
		Leasing could occur in any of the populations, but would be most likely to impact the Uintah, Carbon, Emery, and Rich populations due to mineral potential.
Oil and Gas Wells	Oil and Gas exploration and development	<p>Based upon the reasonable and foreseeable development assumptions in Chapter 4, it is anticipated that 2,968 oil and gas wells will be drilled within occupied Greater Sage-Grouse habitat within the population areas of which 2,289 wells are anticipated to be producing wells. Exploration wells expected in all populations. Development wells anticipated in Uintah, Carbon, Emery, and Rich populations.</p> <p>Effect: The development of wells within these areas could lead to fragmentation and loss of habitat due to construction activities. Increased noise levels associated with traffic and compressors may impact lek attendance. Increased traffic associated with day to day operations may also increase the potential for collision mortality. However, most of these impacts should be removed by management standards identified in the selected alternative.</p>
Asphalt Ridge Tar Sands Development	Lease approximately 6,000 acres of Tar Sands Lands described in the Asphalt Ridge Tract, which is directly adjacent to existing approximately 16,000 acres of State leases	<p>Still in planning and NEPA stages – could impact the Uintah population.</p> <p>Effect: As a largely underground operation on BLM-administered lands, this would disturb a small amount of land associated with ancillary features. On the portions of the mine that would be mined through surface means, habitat would be lost and noise, dust and light would affect adjacent areas.</p>
Flat Canyon Coal Lease by application	The Flat Canyon Coal Lease Tract is approximately 2, 692 acres of federal coal reserves	<p>Forest Service completed the consent to BLM. Approximately 23 acres out of the 2,692 acres are within the Emery Population Area.</p> <p>Effect: The act of leasing would have no direct effect. However, the activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by</p>

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Alton Coal Tract Lease-by-Application	Add 3,576 acres of federal surface or mineral estate to existing 300-acre mine on private land.	management standards identified in the selected alternative. Still in planning and NEPA stages – could impact the Panguitch population. Effect: Activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.
Williams Draw Coal Lease by Application	The proposed action includes 4,200 acres of federal surface and mineral estate; the proposal may have several vents, drilling exploration holes on the surface and underground, and load-out facilities	Still in planning and NEPA stages; could impact the Carbon population. Effect: The act of leasing would have no direct effect. However, the activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.
Greens Hollow Coal Lease by Application	Proposal includes 6,700 acres; a vent is proposed off site; minimal surface disturbances with the exception for exploration drilling	The area has been leased, but development is on hold due to litigation. Would affect the Emery population. Effect: Activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.
Flat Canyon Coal Lease by Application	Lease by Application 3,792 acres; and Exploration License, 595 acres	Leased and under production in the Carbon population. Effect: The act of leasing would have no direct effect. However, the activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.
Gilsonite Leasing	16,810 acres that are currently under prospecting permit application; the permits would either be issued or a Known Gilsonite Leasing Area would be established, thus allowing competitive leasing	The prospecting permit applications have been in place since the late 1980s; Known Gilsonite Leasing Area report ongoing, after which NEPA will begin to address backlogs for these areas in the Uintah population.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Phosphate Fringe Acreage Lease	1,627 acres of fringe acreage lease on BLM-administered lands	<p>Effect: Activities associated with development or prospecting of the permit / lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.</p> <p>NEPA has started and awaiting a Development Scenario to complete the NEPA for this area in the Uintah population.</p>
Phosphate Competitive Lease Application	1,186 acres on National Forest System lands	<p>Effect: The act of leasing would have no direct effect. However, the activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.</p> <p>NEPA has started and awaiting a Development Scenario to complete the NEPA for this area in the Uintah population.</p> <p>Effect: Activities associated with development of the lease could result in loss of habitat and vehicle mortality due to increased traffic. Most of these impacts should be removed by management standards identified in the selected alternative.</p>
Other Items		
Hard Rock Prospecting Permits being considered on Bankhead Jones	Hard rock exploration permits	<p>Pending Consideration for this area in the Sheeprocks population.</p> <p>Effect: Activities associated with development of the lease could result in loss of habitat, vehicle mortality due to increased traffic and disruption of seasonal use areas. Most of these impacts should be removed by management standards identified in the selected alternative.</p>
Gooseberry Narrows Reservoir	Bureau of Reclamation project on Forest Service and private land; project is approximately 1,200 acres	EIS is complete, pending EPA review and approval for this portion of the Carbon population.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Motorized Travel Plan Implementation	Implementation of motorized route designation plans across the planning region	Effect: Activities associated with construction and operation of the reservoir would result in loss of habitat within the project area and a potential increase for vehicle mortality due to increased traffic. However, the habitat lost within the project area may be supplemented by improving the quality and seasonal functionality of the adjacent habitat. Most of the impacts should be removed by management standards identified in the selected alternative.
		Implementation actions underway statewide, with travel planning reasonably foreseeable in the Sheeprocks, Uintah, Carbon and Panguitch populations.
Grand Staircase-Escalante National Monument Management Plan	Development of a resource management plan	Effect: The development of a motorized travel plan would potential help to reduce fragmentation of habitat and centralizing disturbance into areas of lesser importance.
		Still in early planning stages for this area that overlaps the Panguitch population.
Forest Service Sage-Grouse Planning	Forest Service and Utah Division of Wildlife Resources	Effect: This action would provide a framework to manage both the remaining monument areas and the areas no longer within the monument boundaries. It is too early in the process to determine a cumulative effect since the proposed plan is unknown.
		Forest Service has indicated they will also be amending their land use plans. Specific details of their proposed changes are not yet known, but it is anticipated they propose alignment with state management plans and strategies. Applicable to all Greater Sage-Grouse populations with National Forest System Lands.
		Effect: This effort will help to align the Forest Service's plan to be more consistent with the State of Utah's plan and provide the adequate management actions necessary to protect and conserve the Greater Sage-Grouse.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
State of Utah Greater Sage-Grouse Management	Update of the State's Conservation Plan for Greater Sage-Grouse in Utah, as well as implementation of the State's compensatory mitigation rule	<p>Past: The Conservation Plan for Greater Sage-grouse in Utah was finalized in 2013; it was designed to be updated every 5 years. While it requires a 4:1 mitigation ratio in the State's Sage-Grouse Management Areas (SGMA), there was no established approach to implement that mitigation standard to the State's 11 SGMA's.</p> <p>Effect: The plan establishes the management actions necessary for the State of Utah to continue to enhance and conserve the Greater Sage-Grouse while still allowing for economic opportunities.</p> <p>Future: The State is updating their Greater Sage-Grouse plan and incorporating the compensatory mitigation rule that provides a process to develop a banking system to apply the state's 4:1 mitigation ratio that is designed to improve habitat for Greater Sage-Grouse.</p> <p>Effect: This effort will help to refine and identify areas to improve management actions and allow for the incorporation of new and local science to better balance Greater Sage-Grouse management across the state. It will also provide an opportunity for economic development to occur while offsetting the impacts to habitat quality.</p>
Wyoming		
Wildland Fires 2015-2017	BLM: Past – Acres burned on BLM administered land	Approximately 137,000 acres of HMA burned between 2015 and 2017. Post fire restoration and habitat treatments are being implemented, as described below, to diminish impacts of habitat lost to wildland fire.
Fire Restoration (Emergency Stabilization and Rehabilitation)	BLM: Past and Present – Habitat restoration following wildland fires	Approximately 4,030 acres of BLM-administered habitat are either currently being treated or scheduled to be treated according to specific prescriptions outlined in Emergency Stabilization and Burned Area Rehabilitation plans following wildfire.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Habitat Treatments	BLM: Past – Habitat improvement projects	More than 96,000 acres of Greater Sage-Grouse habitat were treated between 2015 and 2017 to maintain or improve conditions for Greater Sage-Grouse. Treatments included conifer removal, fuel breaks, invasive species removal and habitat protection/ restoration.
Land Use and Realty (issued and pending) 2015-2018	BLM: Past ROWs issued on BLM land	BLM Wyoming issued approximately 3,000 ROWs in the planning area between 2015 and 2017. This includes amendments and reauthorizations, which may not have resulted in new disturbance. For ROWs occurring in sage grouse habitat, effects were offset by the management prescriptions in the RMPs and ARMPA.
	BLM: Future pending	There are approximately 590 ROW applications pending review and analysis. New ROWs under the Management Alignment Alternative would align with the management prescriptions of the Core Area Strategy and State of Wyoming Mitigation Framework. No additional cumulative impacts are anticipated, beyond those described.
Oil and Gas	BLM: Past	BLM Wyoming has offered for lease 861,634 acres; 812,123 acres of that total was leased. Leases followed management prescriptions in the RMPs and ARMPA and stipulations apply as described in the leases according to HMA category.
	BLM: Future pending	BLM Wyoming has a scheduled lease sale in June 2018 that will offer 198,588 acres for lease. The actions proposed in the Management Alignment Alternative to not propose to change stipulations analyzed in the 2014 and 2015 plans.
Locatable Mineral Projects	BLM: Past and Present	Between 2015 and 2017, the BLM has approved 17 new mines and/or expansions within the planning area (including non-habitat). The Management Alignment Alternative does not propose changes to any decisions associated with locatable minerals, which were sufficiently analyzed on the existing plans.
	BLM: Future pending	The BLM is currently reviewing 26 plans of operation for new mines, mine expansions and notice-level activities. This number also includes 10 pending mine patents, which are in the process of being patented into private ownership.

Table 4-6
Range-Wide Impacts from Past, Present, and Reasonably Foreseeable Future Actions

Action	Type	Effects
Leasable Mineral Projects (Coal)	BLM: Past and Present	The Management Alignment Alternative does not propose changes to any decisions associated with locatable minerals, and future impacts would be analyzed in future EISs, adhering to existing requirements of the RMPs and ARMPA.
	BLM: Future pending	Two coal lease modifications were issued in 2018, totaling 1,306.61 acres. For lease modifications occurring in sage grouse habitat, effects were offset by the management prescriptions in the RMPs and ARMPA. BLM Wyoming is currently reviewing 4 coal lease applications/modifications totaling 10,148.56 acres. No management decisions for leasable minerals are proposed for change under the Management Alignment Alternative.
Sage-Grouse Conservation	Forest Service- Future	Forest Service has indicated they will also be amending their land use plans. Specific details of their proposed changes are not yet known, but it is anticipated they will propose alignment with state management plans and strategies.

At the regional scale, WAFWA Greater Sage-Grouse management zones and responsible BLM offices include I (Great Plains: BLM Montana and Wyoming), II (Wyoming Basins: BLM Wyoming, Colorado, and Utah), III (Southern Great Basin: BLM Nevada, Northeastern California, and Utah), IV (Snake River Plain: BLM Idaho, Oregon, Nevada, Colorado, Utah, and Montana), V (Northern Great Basin: BLM Oregon, Northeastern California, and Nevada), VI (Columbia Basin: BLM Oregon), and VII (Colorado Plateau: BLM Northwest Colorado and Utah). These zones are an important resource for Greater Sage-Grouse management; and at a regional scale, the following projects are past, present, and reasonably foreseeable that cumulatively effect one or more of the WAWFA management zones. For Nevada and northeastern California, those actions in WAFWA Zones III, IV, and V, which overlap Utah, Idaho, Oregon, and Colorado, would have the greatest potential to contribute to cumulative effects. Note that not all of the projects listed for Utah, Idaho, Oregon, and Colorado are in WAFWA Zones III, IV, and V, and so may not contribute to cumulative effects.

Further, the entire sum of past, present, and reasonably foreseeable actions listed below represent cumulative effects across the range of Greater Sage-Grouse habitat and management areas. These effects are important to consider for future management of the species as a whole and are not solely being analyzed at the local or state level. That is why all ongoing BLM RMPAs/EISs refer to every past, present, and reasonably foreseeable action across all states undergoing a plan amendment.

Wildland fire and invasive species remain the greatest threat to Greater Sage-Grouse in the Great Basin. Between 2008 and 2017, wildfires burned an average of 900,000 acres per year in Greater Sage-Grouse

habitat management areas range-wide¹; this is within the range of projected wildland fire analyzed in the 2015 Final EIS. The BLM has committed resources to habitat restoration and has treated 1.4 million acres of Greater Sage-Grouse habitat range-wide over the past 5 years.

Under the Management Alignment Alternative, the recommendation to withdraw SFAs from location and entry under the Mining Law of 1872 would be removed, as the EIS process considering the withdrawal was cancelled on October 11, 2017. In its 2016 SFA Withdrawal EIS, the BLM quantified the possible adverse effects from locatable mineral exploration and mining on the approximately 10 million acres of SFAs proposed for withdrawal, finding that they would be limited to approximately 9,000 acres of surface disturbance over 20 years, with approximately 0.58 percent of Greater Sage-Grouse male birds affected per year. The other action alternatives evaluated in the 2016 SFA Withdrawal EIS similarly demonstrated minimal benefit of the proposed withdrawal to Greater Sage-Grouse and its habitat.² The cumulative effects of implementing the Management Alignment Alternative are as described in the 2016 SFA Withdrawal EIS, under the No-Action Alternative, in which SFAs are not carried forward.

It is evident from this table that most, if not all, proposed projects undertaken by the BLM on public land and NRCS on private lands are designed to improve Greater Sage-Grouse habitat and create healthy rangelands; therefore, these effects, when added to those from the current proposal, are largely beneficial to Greater Sage-Grouse and are within the bounds of the 2015 cumulative effects analysis described in **Table 4-5**.

4.7 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Section 102(2)(C) of NEPA requires a discussion of any irreversible or irretrievable commitments of resources from an alternative, should it be implemented. An example of an irreversible commitment of a resource is the extinction of a species or loss of a cultural resource site without proper documentation. An irretrievable commitment of a resource is one in which the resource or its use is lost for a period, such as the extraction of oil and gas.

The decision to select one of the alternatives described in this RMPA/EIS does not constitute an irreversible or irretrievable commitment of resources, because the decision does not authorize implementation-level activities. Instead, decisions made under the selected alternative serve to guide future actions and subsequent site-specific decisions. Following the signing of the ROD for this RMPA/EIS, the BLM would develop and carry out implementation plans (activity- or project-specific). Implementation decisions require appropriate project-specific planning and NEPA analysis and constitute the BLM's final approval for on-the-ground activities to proceed. Overall, the action alternatives analyzed in this RMPA/EIS are protective of resources over existing conditions and would not subject any of them to irreversible or irretrievable commitments.

¹ Removing 2012 and 2017, which were above-average wildland fire years, the 8-year average is approximately 500,000 acres burned per year.

²Importantly, mining operations that do occur are subject to regulation under the BLM's surface management regulations at 43 CFR Part 3809. These regulations ensure that operators comply with environmental standards in conducting exploration, mining, and reclamation. For example, the BLM must approve a plan of operations for locatable mining operations on public lands, which includes compliance with the National Environmental Policy Act, National Historic Preservation Act, and Endangered Species Act. Plans of operation must also include those measures to meet specific performance standards and to prevent unnecessary or undue degradation of the lands (43 CFR 3809.411).

4.8 UNAVOIDABLE ADVERSE IMPACTS

Section 102(C) of NEPA requires disclosure of any adverse environmental impacts that could not be avoided should the proposal be implemented. Unavoidable adverse impacts are those that remain following the implementation of mitigation measures or impacts for which there are no mitigation measures. Some unavoidable adverse impacts happen from implementing the RMPA/EIS; others are a result of public use of BLM-administered lands in the planning area.

Implementation of the RMPA along the theme of the alternatives would not result in unavoidable adverse impacts on any resources. The BLM is committed to using the mitigation hierarchy and the RDFs and buffers described in this RMPA/EIS. These mitigation measures and project design features would result in no unavoidable adverse impacts beyond those described in the impacts analysis of this RMPA/EIS and the 2015 Final EIS.

4.9 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

Section 102(C) of NEPA requires a discussion of the relationship between local, short-term uses of the human environment and the maintenance and enhancement of long-term productivity of resources. As described in the introduction to this chapter, short-term is defined as anticipated to occur within the first 5 years of implementation of the activity; long-term is defined as following the first 5 years of implementation but within the life of the RMPA/EIS.

The effects associated with the alternatives in this targeted plan amendment do not cause a change in the relationship between short-term uses and long-term productivity of the human environment; however, when considered with the other management actions from the 2015 Final EIS that are not amended by this RMPA/EIS, the relationships between short-term uses and long-term productivity would be the same as described in the 2015 Final EIS, Section 4.16.

Chapter 5. Consultation and Coordination

This chapter describes the efforts undertaken by the BLM throughout the process of developing the RMPA/EIS to ensure the process remained open and inclusive to the extent possible. This chapter also describes efforts taken to comply with legal requirements to consult and coordinate with various government agencies. These efforts include public scoping; identifying and designating cooperating agencies; consulting with applicable federal, state, and tribal governments; and identifying “any known inconsistencies with State or local plans, policies or programs” (43 CFR 1610.3-2(e)).

5.1 PUBLIC INVOLVEMENT

5.1.1 Public Scoping

The scoping period began with the publication of the NOI in the *Federal Register* on October 11, 2017. The NOI was titled Notice of Intent to Amend Land Use Plans Regarding Greater Sage-Grouse Conservation and Prepare Associated Environmental Impact Statements or Environmental Assessments. During the scoping period, the BLM sought public comments on whether all, some, or none of the 2015 Greater Sage-Grouse plans should be amended, what issues should be considered, and whether the BLM should pursue a state-by-state amendment process or structure its planning effort differently, for example by completing a national programmatic process. Representatives of the BLM engaged with the Western Governors’ Association Sage Grouse Task Force in October of 2017 and January of 2018 to discuss the progress of scoping efforts. In addition, the DOI Deputy Secretary has emphasized that input from state governors would weigh heavily when considering what changes should be made and ensuring consistency with the BLM’s multiple use mission.

Information about scoping meetings, comments received, comment analysis, and issue development can be found in the scoping report available online here: <https://goo.gl/FopNgW>.

5.1.2 Future Public Involvement

Public participation efforts will be ongoing throughout the remainder of the RMPA/EIS process. One substantial part of this effort is the opportunity for members of the public to comment on the Draft RMPA/EIS during the comment period. This Proposed RMPA/Final EIS will respond to all substantive comments that the BLM receives during the 90-day comment period. An NOA will be published in the *Federal Register* to notify the public of the availability of the Proposed RMPA and Final EIS. The NOA will also outline protest procedures during the 30-day period. A Governor’s Consistency Review will occur concurrent with this protest period. Such protests will be addressed in the RODs and necessary adjustments may be made to the RMPA/EIS. A ROD will then be issued by the BLM after the release of the Proposed RMPA/Final EIS, the Governor’s Consistency Review, and any resolution of protests received on the Proposed RMPA/Final EIS.

5.2 COOPERATING AGENCIES

Federal regulation directs the BLM to invite eligible federal agencies, state and local governments, and federally recognized Indian tribes to participate as cooperating agencies when amending RMPs Notice of Intent to Amend Land Use Plans Regarding Greater Sage-Grouse Conservation and Prepare Associated Environmental Impact Statements or Environmental Assessments (43 CFR 1610.3-1(b)). A cooperating agency is any such agency or tribe that enters into a formal agreement with the lead federal agency to

help develop an environmental analysis. More specifically, cooperating agencies “work with the BLM, sharing knowledge and resources, to achieve desired outcomes for public lands and communities within statutory and regulatory frameworks” (BLM Land Use Planning Handbook H-1601-1). These agencies are invited to participate because they have jurisdiction by law or can offer special expertise. Cooperating agency status provides a formal framework for these government units to engage in active collaboration with a lead federal agency in the planning process.

BLM Idaho sent out cooperating agency letters in November 2017, inviting the following agencies (**Table 5-1**) to become cooperators on the upcoming Greater Sage-Grouse plan amendment process.

Table 5-1
Cooperating Agencies

Agencies and Tribes Invited to be Cooperators	Agencies that Accepted	Agencies that Signed Memoranda of Understanding
Cassia County	✓	---
Blaine County	✓	---
Jefferson County	---	---
Lemhi County	---	---
Bingham County	---	---
US Department of Energy	✓	---
Idaho Association of Counties	---	---
Owyhee County	---	---
Department of Defense	---	---
Power County	✓	---
Twin Falls County	---	---
Madison County	---	---
Fremont County	---	---
Army National Guard	---	---
Craters of the Moon National Monument	---	---
US Fish and Wildlife Service	✓	---
Idaho Governor’s Office	---	---
Idaho Governor’s Office of Species Conservation	✓	---
Sawtooth National Forest	---	---
Clark County	---	---
Natural Resource Conservation Service	✓	---
Box Elder County	---	---
Boise National Forest	---	---
Idaho Department of Fish and Game	✓	---
Caribou-Targhee National Forest	✓	---
Salmon-Challis National Forest	✓	---

The BLM worked closely with the State of Idaho to develop an alternative that would address the State’s issues while keeping the pieces of the existing 2015 ROD/ARMPA that were not problematic for the

State. The BLM and the State met with their cooperators as a group on March 12, 2018, and also met six times with portions of the cooperators to discuss issues within their areas of expertise.

5.3 AMERICAN INDIAN TRIBAL CONSULTATION

Various federal laws require the BLM to consult with American Indian tribes during the planning/NEPA decision-making process. This section documents the specific consultation and coordination efforts undertaken throughout the process of developing the LUPA/EIS.

BLM Idaho sent out tribal consultation letters in December of 2017, inviting the following tribes (**Table 5-2**) to consult with the BLM on the upcoming Greater Sage-Grouse plan amendment process.

Table 5-2
Tribal Consultation Letters

Tribes invited to Consult	Tribes Consulted
Duck Valley Shoshone-Paiute Tribe	✓
Confederated Salish and Kootenai Tribes	---
Coeur d' Alene Tribe	---
Shoshone-Bannock Tribes	✓
Kootenai Tribe	---
Nez Perce Tribe	---

BLM Idaho met with the Shoshone-Paiute Tribe on several occasions in late 2017 and early 2018 to invite them to consult with the BLM and to keep them updated on the status of the plan amendment. On March 29 the BLM met with the Shoshone Bannock Tribe's resource staff to invite them to consult and to update them on the status of the plan amendment.

5.4 LIST OF PREPARERS

This RMPA/EIS was prepared by an interdisciplinary team of staff from the BLM, in collaboration with Environmental Management and Planning Solutions, Inc.

Name	Role/Responsibility
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Chris Lund	Analysis and Document Preparation
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Peggy Redick	Data Gathering
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Anne Briggs	Review

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Glossary

Adaptive management. A type of natural resource management in which decisions are made as part of an ongoing science-based process. Adaptive management involves testing, monitoring, and evaluating applied strategies, and incorporating new knowledge into management approaches that are based on scientific findings and the needs of society. Results are used to modify management policy, strategies, and practices.

Amendment. The process for considering or making changes in the terms, conditions, and decisions of approved Resource Management Plans or management framework plans. Usually only one or two issues are considered that involve only a portion of the planning area.

Avoidance/avoidance area. These terms usually address mitigation of some activity (i.e., resource use). Paraphrasing the CEQ Regulations (40 CFR 1508.20), avoidance means to circumvent, or bypass, an impact altogether by not taking a certain action, or parts of an action. Therefore, the term “avoidance” does not necessarily prohibit a proposed activity, but it may require the relocation of an action, or the total redesign of an action to eliminate any potential impacts resulting from it. Also see “*right-of-way avoidance area*” definition.

Best Management Practices (BMPs). A suite of techniques that guide or may be applied to management actions to aide in achieving desired outcomes. BMPs are often developed in conjunction with land use plans, but they are not considered a planning decision unless the plans specify that they are mandatory.

Biologically Significant Unit (BSU). A geographical/spatial area within Greater Sage-Grouse habitat that contains relevant and important habitats that is used as the basis for comparative calculations to support evaluation of changes to habitat.

Compensatory mitigation. Compensating for the residual impact by replacing or providing substitute resources or environments (40 CFR 1508.20).

Controlled Surface Used (CSU). CSU areas are open to fluid mineral leasing, but the stipulation allows the BLM to require special operational constraints, or the activity can be shifted more than 200 meters (656 feet) to protect the specified resource or value.

Cooperating agency. Assists the lead federal agency in developing an environmental assessment or environmental impact statement. These can be any agency with jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR 1501.6). Any tribe or Federal, State, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

Council on Environmental Quality (CEQ). An advisory council to the President of the US established by the National Environmental Policy Act of 1969. It reviews federal programs to analyze and interpret environmental trends and information.

Cumulative effects. The direct and indirect effects of a proposed project alternative's incremental impacts when they are added to other past, present, and reasonably foreseeable actions, regardless of who carries out the action.

Decision area. Public lands and mineral estate managed by the US Department of Interior, Bureau of Land Management that are within the planning area and are encompassed by all designated habitat.

Direct impacts. Direct impacts are caused by an action or implementation of an alternative and occur at the same time and place.

Environmental impact statement (EIS). A detailed statement prepared by the responsible official in which a major federal action that significantly affects the quality of the human environment is described, alternatives to the proposed action are provided, and effects are analyzed.

Fluid minerals. Oil, gas, coal bed natural gas, and geothermal resources.

General Habitat Management Area (GHMA). Areas of seasonal or year-round Greater Sage-Grouse habitat outside of priority habitat.

Geographic Information System (GIS). A system of computer hardware, software, data, people, and applications that capture, store, edit, analyze, and display a potentially wide array of geospatial information.

Habitat. An environment that meets a specific set of physical, biological, temporal, or spatial characteristics that satisfy the requirements of a plant or animal species or group of species for part or all of their life cycle.

Impact. The effect, influence, alteration, or imprint caused by an action.

Important Habitat Management Area (IHMA). High value habitat and populations that provide a management buffer for the PHMAs and connect patches of PHMAs.

Indirect impacts. Indirect impacts result from implementing an action or alternative but usually occur later in time or are removed in distance and are reasonably certain to occur.

Leasable minerals. Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. These include energy-related mineral resources such as oil, natural gas, coal and geothermal, and some non-energy minerals, such as phosphate, sodium, potassium, and sulfur. Geothermal resources are also leasable under the Geothermal Steam Act of 1970.

Lease stipulation. A modification of the terms and conditions on a standard lease form at the time of the lease sale.

Lek. An arena where male sage-grouse display for the purpose of gaining breeding territories and attracting females. These arenas are usually open areas with short vegetation within sagebrush habitats, usually on broad ridges, benches, or valley floors where visibility and hearing acuity are excellent.

Long-term effect. The effect could occur for an extended period after implementation of the alternative. The effect could last several years or more.

Management decision. A decision made by the BLM to manage public lands. Management decisions include both land use plan decisions and implementation decisions.

Minimization mitigation. Minimizing impacts by limiting the degree or magnitude of the action and its implementation (40 CFR 1508.20 (b)).

Mitigation. Includes specific means, measures or practices that could reduce, avoid, or eliminate adverse impacts. Mitigation can include avoiding the impact altogether by not taking a certain action or parts of an action, minimizing the impact by limiting the degree of magnitude of the action and its implementation, rectifying the impact by repairing, rehabilitation, or restoring the affected environment, reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and compensating for the impact by replacing or providing substitute resources or environments.

Modification. A change to the provisions of a lease stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the leasehold to which the restrictive criteria are applied.

No surface occupancy (NSO). A major constraint where use or occupancy of the land surface for fluid mineral exploration or development and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, construction of wells and/or pads) are prohibited to protect identified resource values. Areas identified as NSO are open to fluid mineral leasing, but surface occupancy or surface-disturbing activities associated with fluid mineral leasing cannot be conducted on the surface of the land. Access to fluid mineral deposits would require horizontal drilling from outside the boundaries of the NSO area.

Planning area. The geographical area for which resource management plans are developed and maintained regardless of jurisdiction.

Planning criteria. The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis, and data collection during planning. Planning criteria streamlines and simplifies the resource management planning actions.

Planning issues. Concerns, conflicts, and problems with the existing management of public lands. Frequently, issues are based on how land uses affect resources. Some issues are concerned with how land uses can affect other land uses, or how the protection of resources affects land uses.

Policy. This is a statement of guiding principles, or procedures, designed and intended to influence planning decisions, operating actions, or other affairs of the BLM. Policies are established interpretations of legislation, executive orders, regulations, or other presidential, secretarial, or management directives.

Priority Habitat Management Areas (PHMA). Areas that have been identified as having the highest conservation value to maintaining sustainable Greater Sage-Grouse populations; they include breeding, late brood-rearing, and winter concentration areas.

Required Design Features (RDFs). Means, measures, or practices intended to reduce or avoid adverse environmental impacts. A suite of features that would establish the minimum specifications for certain activities (i.e., water developments, mineral development, and fire and fuels management) and mitigate adverse impacts. These design features would be required to provide a greater level of regulatory certainty than through implementation of Best Management Practices. In general, the design features are accepted practices that are known to be effective when implemented properly at the project level.

Resource management plan (RMP). A land use plan as prescribed by the Federal Land Policy and Management Act that establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives, and actions to be achieved.

Short-term effect. The effect occurs only during or immediately after implementation of the alternative.

Stipulation (general). A term or condition in an agreement or contract.

Stipulation (oil and gas). A provision that modifies standard oil and gas lease terms and conditions in order to protect other resource values or land uses and is attached to and made a part of the lease. Typical lease stipulations include No Surface Occupancy, Timing Limitations, and Controlled Surface Use. Lease stipulations are developed through the land use planning process.

Timing Limitation (TL). Areas identified for timing limitations, a moderate constraint, are closed to fluid mineral exploration and development, surface-disturbing activities, and intensive human activity during identified timeframes. This stipulation does not apply to operation and basic maintenance activities, including associated vehicle travel, unless otherwise specified. Construction, drilling, completions, and other operations considered to be intensive are not allowed. Intensive maintenance, such as workover wells, is not permitted. TLs can overlap spatially with no surface occupancy and controlled surface use, as well as with areas that have no other restrictions.

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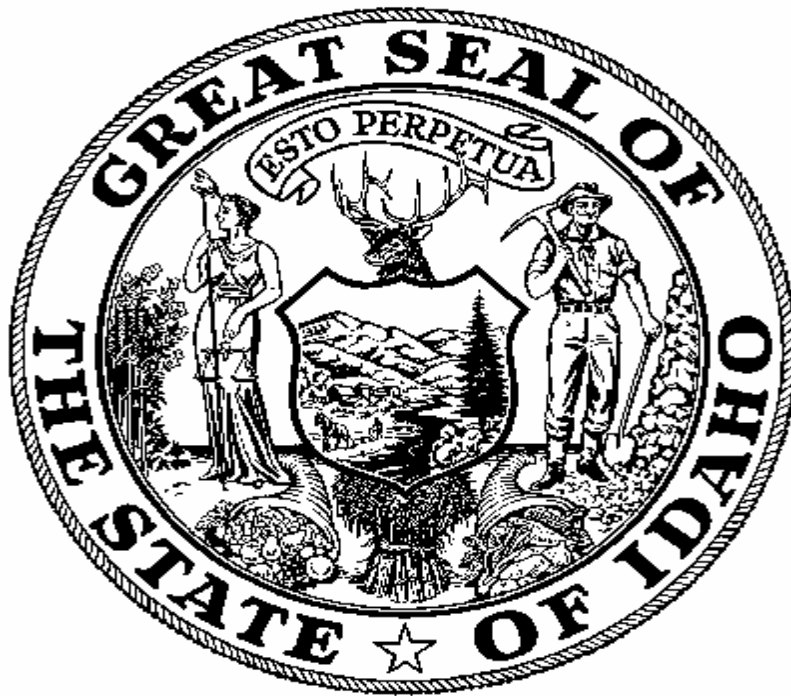
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Appendix I

Federal Alternative of Governor C.L. "Butch" Otter
for Greater Sage-Grouse Management in Idaho
(September 5, 2012)

FEDERAL ALTERNATIVE OF GOVERNOR C.L. "BUTCH" OTTER



FOR GREATER SAGE-GROUSE MANAGEMENT IN IDAHO

September 5, 2012 Version

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BACKGROUND

As Governor of the State of Idaho, I hereby submit to the U.S. Secretary of the Interior and U.S. Secretary of Agriculture (collectively, “the Secretary”) the State of Idaho’s Alternative (“Idaho’s Alternative”) for incorporation into the National Greater Sage-Grouse Land Use Planning Strategy (“Strategy”) of the U.S. Bureau of Land Management (“BLM”) and U.S. Forest Service (“USFS”) (*see* BLM/USFS 2012). The Strategy aims to incorporate objectives, desired habitat conditions and management actions into land use plans for Federal lands – for the BLM, the Resource Management Plans (“RMPs”) required by the Federal Land Policy and Management Act (“FLPMA”) and for the USFS, the land management plans (“LMPs”) required by the National Forest Management Act (“NFMA”)—by September 30, 2014. The ultimate outcome for the Strategy is to conserve the Greater sage-grouse (*Centrocercus urophasianus*) (“sage-grouse”) and its habitat and potentially avoid a listing under the Endangered Species Act (“ESA”) (*see* BLM 2011a).

The State of Idaho wishes to express its appreciation for the Secretary’s recognition of the important role states can play in managing and conserving the sage-grouse. This recognition is also evinced in the ESA as it directs the Secretary to “take[ing] into account those efforts” being made by a state prior to a listing determination. 16 U.S.C. § 1533(b)(1)(A). Accordingly, I believe the recommendations contained herein not only provide a balanced approach to this complex natural resource issue, but also ensure the long-term sustainability of those habitat attributes necessary to preclude the need to list the species under the ESA.

In order to place Idaho’s Alternative in proper context, it is necessary to set out a brief overview of the process the State employed. As Idaho currently enjoys viable and widespread populations of sage-grouse, I was fully aware of the need for a carefully planned process to ensure we conserved the species and its habitat while maintaining predictable levels of land use. I would strongly urge our Federal partners to approach the issue in this fashion.

GOVERNOR’S SAGE-GROUSE TASK FORCE

On March 9, 2012, I issued Executive Order 2012-02 establishing the Governor’s Sage-Grouse Task Force, hereafter “Task Force” (*see* Task Force Website, available at: <http://fishandgame.idaho.gov/public/wildlife/?getPage=310>). The Task Force was a diverse group of stakeholders comprised of representatives from local sage-grouse working groups, conservation interests, state and local officials and industry. The Task Force was charged with providing recommendations on actions for developing a state-wide regulatory mechanism to preclude the need to list the species under the ESA.

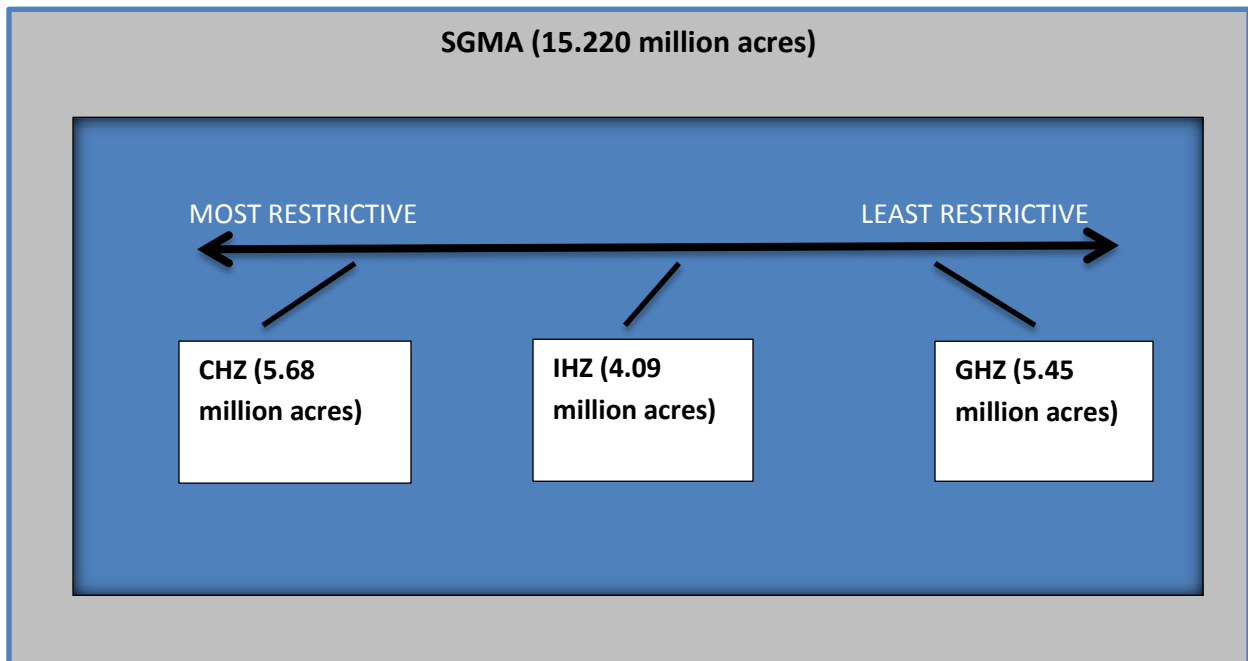
In March through May 2012, the Task Force met eight times in various locations across the State of Idaho. Each meeting was open to the public and provided an opportunity for the public to comment on sage-grouse conservation and its potential effects. Additionally, the Idaho Department of Fish and Game (“IDFG”) hosted a Web page displaying the times and locations of Task Force meetings, agenda, meeting notes, and presentations made during the meetings. *See* IDFG 2012b. Thus, the Task Force conducted an open and transparent information-gathering and decision-making process.

After much deliberation and discussion, the Task Force on June 15, 2012—aided by the technical expertise of IDFG, the U.S. Fish and Wildlife Service (“Service”), and other relevant State and Federal agencies—delivered its recommendations to me for review and consideration. After carefully reviewing those recommendations, I developed a set of “guiding principles” to help evaluate the strength of the Task Force’s recommendations, public comments and other important considerations. These guiding principles will be discussed in further detail under section I.

OVERVIEW OF THE STATE’S ALTERNATIVE

Consistent with the unanimous recommendation of the Task Force, the State is adopting the designation of a Sage-Grouse Management Area (“SGMA”) with three distinct management zones: Core Habitat (“CHZ”), Important Habitat (“IHZ”) and General Habitat (“GHZ”).

Figure 1. Idaho’s Sage-Grouse Management Area¹



¹ The acreages displayed in Figure 1 are approximate values.

Generally, these management zones outline a suite of basic management activities that may, under certain conditions, or may not occur within a given area. In other words, the three management zones within the SGMA represent a management continuum that includes at one end, a relatively restrictive approach aimed at providing a high level of protection to the species within the CHZ, and on the other end, a relatively flexible approach for the GHZ allowing for more multiple-use activities. While the IHZ provides greater flexibility than in the CHZ, the overall quality and ecological importance of the habitat within this zone is more closely aligned with the habitat in the CHZ than in the GHZ.

Allocation to a specific management zone does not mandate or direct the relevant Federal agency to propose or implement any action; rather, the three habitat zones provide an array of permitted and prohibited activities. Activities not specifically addressed by the Alternative are still subject to the allowances and restrictions of the applicable resource management plan.

The measures set forth below are essential to sage-grouse conservation in Idaho and should receive not only priority consideration in the Strategy, but also in the shaping of future agency budgets. In order to accomplish the objectives set out below, I strongly urge State and Federal agencies, including the Service, BLM, USFS and other federal agencies to work collaboratively to ensure uniform and consistent application of Idaho's Alternative. In particular, BLM needs to make federal funding for fire suppression, especially in the CHZ, a top priority.

It is important to note that this document does not represent a complete list of sage-grouse actions for the State of Idaho. This document only provides special management for sage-grouse on lands managed by the BLM and USFS, and while beneficial to other sage-steppe species, agencies will still have the obligation to analyze other values when considering a proposed action.

That said, with this management framework in place, the State will approach willing private parties, local governments, other Federal partners, and the Idaho Department of Lands to see what actions are necessary and appropriate to complement the State's Federal Alternative. Furthermore, it is important to note that the relevant Federal agencies in considering these measures as part of environmental analyses, planning updates and ESA listing determinations, should recognize that actions on these lands can have direct and indirect impacts on State endowment trust lands managed by the Idaho Department of Lands. Thus, it is important to evaluate sage-grouse management in a comprehensive and holistic manner.

STATE OF IDAHO'S ALTERNATIVE

The following section further explains the “guiding principles” used to develop Idaho’s Alternative.

I. GUIDING PRINCIPLES

A. Task Force Recommendations

Because the Task Force represents the diverse stakeholders associated with this issue, the State has made a concerted effort to defer to their recommendations. In areas where the Task Force provided alternative recommendations and/or left actions to the discretion of the State, we have endeavored to capture the intent of the Task Force consistent with the parameters set out in the Governor’s Executive Order.

B. ESA Considerations

On March 23, 2010, the Service determined the species warrants listing over all of its range, including Idaho, but is precluded by higher listing actions. 75 Fed. Reg. 13,910 (Mar. 23, 2010). Specifically, the Service found Federal resource management plans deficient with respect to addressing the primary threats to the species—namely, habitat fragmentation due to wildfires, invasive species and infrastructure development. *See* 75 Fed. Reg. at 13,973-80.

Following the Service’s decision, the United States District Court for the District of Idaho ruled that pursuant to a D.C. District Court settlement, the agency must reevaluate the status of the species under the ESA by September 30, 2015. In response to this deadline, the Secretary of the Interior in December 2011 invited the eleven western states impacted by a potential listing of the species to develop state-specific regulatory mechanisms to address these cited deficiencies in an effort to preclude a listing under the ESA. Accordingly, one of the State’s primary objectives in submitting this Alternative is to develop a management framework that passes muster under the ESA.

C. Idaho’s Management Approach

The State’s management approach was designed to be clear and measurable over varying spatial and temporal scales. This approach consists of management objectives attempting to address key decision points outlined in the Service’s 2010 determination. As mentioned above, the Service’s 2010 decision cited lack of regulatory mechanisms and habitat loss as the primary drivers for its warranted but precluded decision. Importantly, both of these factors affect the population status of the species. The Idaho Sage-Grouse Management Approach includes: (1) implementation of regulatory mechanisms to support the overall management and conservation objectives of the species; (2) stabilization of habitats and populations, including a systematic review of habitat and

population status; and (3) development of adaptive regulatory triggers and a wildfire emergency clause to address sudden and unanticipated changes.

The best available information indicates that wildfire, invasive species and infrastructure, as defined below, are the primary threats to sage-grouse in Idaho. The State aided by the valuable contributions of the Task Force developed a suite of regulatory measures to address these primary threats as well as some activities identified by the Service as secondary threats (e.g., recreation, improper livestock grazing and West Nile virus). The State believes that implementation of these measures will provide significant conservation benefits to sage-grouse, other sage-steppe obligate species, and should be sufficient to preclude a listing under the ESA in Idaho.

Notwithstanding these efforts, unexpected and catastrophic events (e.g., major wildfire event(s), West Nile virus) may result in a substantial loss of habitat and concomitant decline in sage-grouse populations sufficient to trigger a change in the regulatory approach to the issue. Hence, the State has developed adaptive regulatory triggers and an emergency wildfire clause to ensure the populations and habitats within the CHZ, and to a lesser extent, the IHZ are maintained and enhanced. These adaptive triggers are intended to provide a regulatory backstop for navigating unanticipated and deleterious impacts to the species.

If these measures prove necessary, the State would still be well positioned to conserve the species and its habitat, while maintaining predictable levels of land use. It is important to note the development and implementation of regulatory triggers, primarily to deal with wildfire, is a new approach for managing this particular species. With that recognition, the State anticipates continuing to work with its partners to refine this feature of the plan to ensure the triggers are properly attuned to the needs of the State and the species.

To aid in the assessment of this management approach, the State has divided the SGMA into four individual Conservation Areas (“CA”) across the State: two north (Mountain Valleys, Desert) and two south (West Owyhee, Southern) of the Snake River. Each Conservation Area is divided into Core, Important, and General management zones (“MZs”) based upon modeling of sage-grouse breeding bird density, habitat connectivity and persistence, scientific knowledge based on surveys and radio-telemetry studies, and the recommendations of the Task Force.

Although wildfire, infrastructure, and invasive species pose threats for sage-grouse in all CAs, wildfire and invasive species tend to be a greater issue in the Desert and West Owyhee CAs than in the Mountain Valleys or Southern CAs. Additionally, sage-grouse habitats in the Desert and West Owyhee CAs are relatively contiguous, while those in the Mountain Valleys and Southern CAs tend to be more fragmented. North of the Snake River, the CHZ is approximately three million acres, while the CHZ south of the Snake River is approximately 2.7 million acres.

Acreage for the CHZ and IHZ in the four CAs is presented in Table 1. These four CAs are further described below:

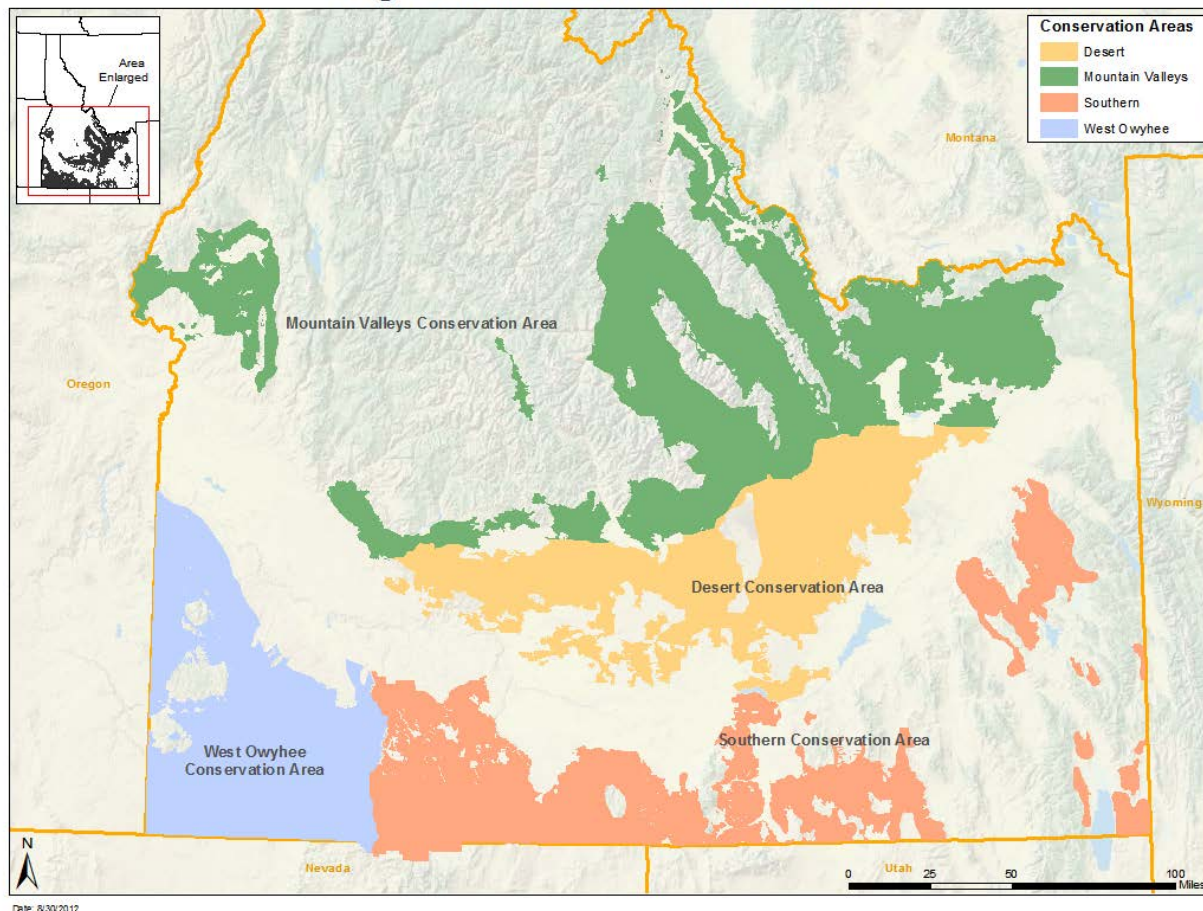
North of the Snake River

- Mountain Valleys CA— Starting at Rexburg and extending west, sage-grouse habitat north and west of Highway 33 to Howe, Highway 33/22 to Arco, Highway 26/20/93 to Carey, Highway 20 west to Mountain Home, south from Mountain Home on Highway 51 to the Snake River. West-Central is included in this area.
- Desert CA—South of the above CA.

South of the Snake River

- West Owyhee CA—West of the Jarbidge River.
- Southern CA—East of the Jarbidge River, including East Idaho uplands and Bear Lake Plateau.

Sage Grouse Conservation Areas



MANAGEMENT OBJECTIVES

Objective 1: Implement Regulatory Mechanisms – The State’s first objective is to implement the regulatory mechanisms provided herein to maintain and enhance sage-grouse habitats, populations and connectivity in areas within the CHZ, buffered by strategic areas within IHZ, dominated by sagebrush. Through the implementation of these mechanisms, the State will be able to provide a level of protection sufficient to conserve at least 65% of the current known leks within the State, which are fully captured in the CHZ. Recognizing the risk and difficulty of controlling wildfire, invasive species and providing the opportunity to consider limited high-value infrastructure development, the IHZ provides an additional population buffer.

The effectiveness of this objective with respect to the primary threats of wildfire, invasive species and infrastructure will be assessed every three years for each Conservation Area. Secondary threats addressed in this Alternative will be evaluated according the various schedules contained in the regulatory language. IDFG will serve as the lead in conducting these assessments in concert with the Governor’s Office of Species Conservation and relevant Federal agencies as the management of the species is currently under the jurisdiction of the State of Idaho.

Objective 2: Stabilize Habitats and Populations – The second management objective examines the effectiveness of the regulatory measures by monitoring the stability of habitat and population trends over time. As described above, the State recognizes the need to regularly analyze the effectiveness of the regulatory measures as well as to discern whether active conservation and restoration efforts, including conifer control, wildfire suppression, and more passive habitat protection techniques such as fuel breaks are effective strategies. Areas within the CHZ, and to a lesser extent the IHZ, will be used for baseline comparison to evaluate progress in achieving this objective.

During the first three-year period (2012-2015) of implementation, Idaho’s management approach will emphasize limiting habitat loss in the CHZ and IHZ respectively to no more than a ten percent (10%) loss due to fire and/or infrastructure development resulting in a proportionate reduction of males counted on leks within a particular Conservation Area. This allowance is made because of the difficulty in developing effective wildfire suppression programs, including allocation of appropriate resources and infrastructure projects currently planned and/or underway.

Should a ten percent loss occur within this timeframe, IDFG in coordination with the Governor’s Office of Species Conservation and other relevant State and Federal agencies will initiate a management review of the State’s regulatory approach to assess the causal factors for declines. Conceptually, the review would include a determination of whether the loss is based on a population-related decline (e.g., West Nile virus, drought) or is driven by habitat loss. If the loss

is habitat-driven, the review team will assess the effectiveness of current best management practices, funding levels and restoration efforts in order to preclude the triggering of the adaptive regulatory triggers.

Three primary indicators provide a baseline for population status:

- 1) Maximum number of males counted on lek routes in 2011 within CHZ.
- 2) Number of active leks counted in 2011 within CHZ.
- 3) Average rate of population change.

Males counted on lek routes, numbers of leks and rate of population change provide a solid baseline against which future comparisons will be made to assess the success of the approach or indicate when populations may be in trouble potentially triggering additional conservation actions.

Using the average value for λ (finite rate of change) for 2009-2011 within CHZ is a relatively new approach for monitoring sage-grouse populations. Under this evaluation, population growth calculations (λ) will be compared to a value of 1.0 which indicates a stable population and evaluated for statistical significance.

Recognizing that this indicator was not discussed in any detail with the Task Force, the State will continue working with its partners to better understand this population evaluation tool to ensure a consistent on-the-ground application. In addition, the State may request a review of this approach by Dr. Oz Garton (Bio-statistician, University of Idaho). The State reserves the right to modify or remove the evaluation tool if it's application would lead to the regulatory triggers being tripped unnecessarily, or conversely, not being sensitive enough to changes on the landscape.

Table 1. Acreage of the CHZ and IHZ by Conservation Area in 2011.

Area	Core	% Core	Important	% Imp
North of the Snake River	2,994,000	34	2,480,000	28
Desert	1,044,000	33	751,000	24
Mountain Valleys	1,949,000	36	1,729,000	32
South of the Snake River	2,686,000	41	1,609,000	24
Southern	948,000	25	975,000	26
West Owyhee	1,738,000	61	634,000	22
Grand Total	5,680,000	37	4,089,000	27

Table 2. Species Population in the CHZ and IHZ by Conservation Area based on 2011 lek data.

Zone	Males Counted				Active leks			
	Core	%Core	Important	% IMP	Core	%Core	Important	% IMP
North of Snake River	4710	79	907	15	196	71	57	21
Desert CA	2332	83	294	10	101	78	17	13
Mountain Valleys CA	2378	77	613	20	95	64	40	27
South of Snake River	2468	64	1203	31	142	63	67	30
Southern CA	642	41	758	48	59	49	47	39
West Owyhee CA	1826	80	445	20	83	80	20	19
Grand Total	7178	73	2110	22	338	67	124	25

ADAPTIVE REGULATORY TRIGGERS AND WILDFIRE EMERGENCY RESPONSE CLAUSE

As mentioned above, sage-grouse adaptive regulatory triggers were developed to provide a regulatory backstop to prevent further loss and stabilize habitats and populations in the CHZ and IHZ where a demonstrated significant loss has either occurred over time or unexpectedly. These adaptive triggers are used when dramatic shifts in population or habitat occurs. Additionally, an emergency wildfire clause was developed to direct immediate response following a significant loss of sage grouse habitat due to catastrophic wildfire.

Whereas a review of the management approach is initiated when a Conservation Area exceeds a ten percent loss, an adaptive regulatory trigger—extending the conservation benefit of the measures in the CHZ to the IHZ—automatically occurs if two out of the three criteria outlined below are demonstrated. In developing these triggers it is important to note that sage-grouse populations often lag in their response to habitat loss and fragmentation. A negative population response may not be detected for three to five years following the habitat disturbance. Therefore, a habitat measure is also a component of the adaptive management trigger.

- i. Maximum number of males on lek routes declines by >20% over a three-year period compared to 2011 values.
- ii. A 30% or greater loss of sagebrush habitat is documented within defined breeding or winter habitat during a three-year period.
- iii. The finite rate of change (λ) over 3 years starting with the baseline years 2009- 2011 is significantly less than 1.0.

As mentioned above, the number of active leks is a valuable indicator of population status and can be used to further inform decisions guided by the above triggers. Declines by >20% over a three-year period compared to 2011 values would indicate a problem. With the stated caveat above, the State may add, modify or remove criterion (iii) replacing the rate of change for evaluating whether to apply the adaptive regulatory trigger.

When the adaptive regulatory trigger is operative, population data and associated habitats will be reviewed to determine whether the problem is habitat related (e.g., fire) or caused by some other population-related issue (e.g., West Nile virus). If the problem is habitat related, the CHZ best management practices (*see* Section V, below) will be applied to areas in the IHZ within the same Conservation Area. For example, and while the trigger is operational, a project proponent in the IHZ would have to meet the more stringent criteria of the CHZ for developing new infrastructure. If the problem is not habitat related, appropriate management actions will be employed to minimize or alleviate the threat.

As mentioned previously, the State is also proposing an emergency clause to address dramatic habitat loss due to wildfire similar to the losses experienced in the Murphy Complex Fire. The current emergency clause states that where a wildfire burns 200,000 acres or more of CHZ habitat, and at least 50% of the burned acres contained important breeding or wintering habitat, the CHZ regulatory provisions shall apply to the IHZ within the relevant Conservation Area. The State may revise this clause based on a better understanding—e.g., mapping—of the important breeding and wintering habitat within the CHZ and IHZ.

D. Existing State Sage-Grouse Plan

In 1997, the then Idaho Sage-grouse Task Force, under the direction of the IDFG Commission, completed the Idaho Sage-grouse Management Plan (“1997 Plan”). The 1997 Plan divided Idaho into sage-grouse management areas and called for the creation of Local Working Groups (“LWGs”) to develop sage-grouse management plans for each of Idaho’s sage-grouse planning areas. Currently, for twelve local planning areas, nine LWG plans are completed, one LWG plan is nearly complete, and one plan is in progress.

Between 1999 and 2003, the Service received eight petitions to list the species as endangered or threatened under the ESA. In April 2004, the Service determined three of the petitions to list the species provided substantial information that listing might be warranted, thus initiating a comprehensive range-wide status review.

Based on the status review, the Idaho State Sage-Grouse Advisory Committee (“SAC”) in 2003 was convened to assist the State in updating the 1997 Plan. The Conservation Plan for the Greater Sage-Grouse in Idaho was completed in 2006 (“2006 Plan”). The 2006 Plan was amended in 2009 to include the completion of the Implementation Chapter.

This Alternative builds upon, supplements, and in some instances replaces the 2006 State Plan and LWG plans by identifying habitat zones, adaptive regulatory triggers and concrete best management practices for primary and some secondary threats as identified by the Service necessary to preclude a listing. For activities not addressed by this Alternative, including predation issues, the 2006 State Plan and LWG plans will continue to be operative. For the sake of completeness, Idaho’s 2006 Plan is incorporated herein by reference.

E. Valid Existing Rights

All management zones and recommendations are intended to be subject to and protect all valid existing rights. It is critical, especially for areas within the CHZ and IHZ that existing land uses and landowner activities continue to occur, particularly agricultural activities on all land ownerships.

F. Maps

The State recognizes that any attempt to map sage-grouse habitat must, by necessity, be at a broad, programmatic scale. The mapping of boundaries presented above is not intended to equate to verified boundary locations or on-the-ground habitat types from which the public can determine with certainty whether any particular location is inside or outside of a particular management zone.

Rather, the mapping exercise is intended to give governmental entities, land managers, project proponents and the public a general idea of where certain types of habitat and conservation priorities are spatially located as of the date of the map. The State also recognizes that this mapping exercising depicting current habitat for the species is not static, and any map must be verified through site-specific environmental analysis. Moreover, the map does not alleviate the duty of State and Federal agencies to determine the actual quality and trends of the habitat at a specific location where, for example, a project is proposed or grazing permit is up for renewal.

G. Infrastructure

When the Alternative refers to measures regarding infrastructure, it is referring to discrete, large-scale anthropogenic features, including highways, high voltage transmission lines, commercial wind projects, energy development (e.g., oil and gas development, geothermal wells), airports, mines, cell phone towers, landfills, residential and commercial subdivisions, etc.

Infrastructure related to small-scale ranch, home and farm businesses (e.g., stock ponds, fences, range improvements) do not fall within this definition. These issues are not included within this definition, and are addressed in other sections of the Alternative or through local resource management plans.

H. Mitigation Framework

Where compensatory mitigation—such as, for new infrastructure project authorized in the CHZ—is required to off-set impacts to sage-grouse or their habitats, the Idaho Sage-Grouse Mitigation Framework (see ISAC 2011) is the preferred mechanism to plan, select, implement and monitor these types of projects. Potential compensatory mitigation should be guided by a science-based statewide strategy to guide the selection of mitigation actions that will receive funding based on the benefits to sage-grouse populations. For example, restoration efforts are

likely to target perennial grasses and conifer encroachment areas within or adjacent to the CHZ, and secondarily, on perennial grasses and conifer encroachment areas within the IHZ with low fire risk. The Task Force recognized the importance of these targeted restoration efforts by including areas within the management regime of the CHZ current not meeting the general biological standard of 25-50% breeding bird density as described below in order to ensure these areas would still retain high restoration potential.

Mitigation efforts will focus on increasing the resiliency and productivity of sage-grouse populations and habitats, especially within the CHZ. Should these efforts materialize; the State will consider establishing a mitigation bank of sage-grouse habitation restoration projects that future development projects would repay through compensatory mitigation requirements. The State recognizes that this is a key provision in this Alternative, and intends to provide more detail on this component through the Governor's Implementation Commission.

I. Livestock Grazing Management

No studies exist directly relating livestock grazing systems or stocking rates to sage-grouse abundance or productivity. Most concerns about the effects of grazing on sage-grouse are localized in nature, whereas the species is demonstrated to be more responsive to stressors at a larger landscape. Therefore, grazing should be viewed as a landscape stressor with monitoring and management actions tailored accordingly.

Numerous studies have been published providing detailed information on characteristics of sage-grouse seasonal habitats (Knick and Connelly 2011). These studies provide insight on heights and cover of sagebrush and herbaceous plants needed for productive habitats (Connelly et al. 2000).

Based on this information, opportunities exist for livestock permittees, Federal and State agencies and university researchers to collaborate in an effort to fine-tune knowledge of current conditions and needed management actions in sage-grouse habitats throughout southern Idaho. This work would provide needed insight into current conditions within sage-grouse habitat and guide specific management actions necessary for ensuring healthy and stable sage-grouse populations.

Approach:

While grazing management options should be considered at a landscape scale, livestock grazing is typically considered in a site-specific context over time where vegetative condition can be manipulated by the timing and intensity of grazing practices. Currently, this is being done by designating allotments and scheduling grazing periods based on factors such as elevation, weather and plant growth (e.g., high elevations are grazed during summer months).

The three habitat zones provide additional options for scheduled grazing and should be considered. Altering grazing schemes in allotments within the CHZ, where needed and

appropriate, may be facilitated by enhanced grazing opportunities with introduced seedings or areas with lower value to sage-grouse (e.g., GHZ). The unintended consequences of altering grazing use, such as a possible increased risk of wildfire, must be carefully considered in any management proposal.

Guidelines for managing sage-grouse habitats and populations have been published (Connelly et al. 2000, Hagen et al. 2007) and are often included in various management plans. These guidelines describe *characteristics* of productive sage-grouse habitats based on a large number of studies conducted throughout the species' range. However, they do not reflect data collected in all parts of the range nor do they reflect data collected from randomly sampled locations. Thus, this information should not be considered as providing *standards* by which to judge effects of livestock grazing on the ultimate quality of sage-grouse seasonal habitats.

Proper grazing management greatly benefits from flexibility and the opportunity to schedule and adjust intensity, timing, duration, and frequency of grazing use over time in a manner that maintains rangeland health and habitat quality. In addition, vegetative characteristics of sage-grouse seasonal ranges can change spatially and temporally due to a wide variety of other influences. Therefore, these sage-grouse habitat characteristics should be viewed as a tool for assessing habitats and guiding management actions but not as a means of dictating grazing strategies or stocking rates. On-the-ground management actions and strategies to meet these habitat characteristics should be informed local resource knowledge and conditions.

Management Framework:

Grazing within the CHZ and IHZ will be managed according to the process outlined in the text below. The first step, and perhaps the most important, is to inform and educate affected permittees regarding sage-grouse habitat needs and conservation measures. These habitat needs or characteristics outlined in Tables 3-5 will be incorporated into relevant resource management plans as the desired conditions with the understanding that these desired conditions may not be achievable: (a) due to the existing ecological condition, ecological potential or the existing vegetation; or (b) due to casual events unrelated to existing livestock grazing.

Based on these habitat characteristics, conduct fine and site scale-habitat assessments to help inform grazing management. Where necessary, a determination of factors causing any failure to achieve the habitat characteristics (Tables 3, 4 and 5) will be conducted at a resolution sufficient to document the habitat condition. This determination will include consideration of local spatial and inter-annual variability. A determination of issues attributable to livestock grazing management should not result from one year of data at a specific location within an allotment.

The assessment process will be completed in conjunction with scheduled term grazing permit renewals (i.e., every ten years). Given limited agency resources, prioritization will be given to areas that have the potential to provide the greatest benefit to sage-grouse. Allocation of resources should be concentrated on allotments within the CHZ that have declining sage-grouse populations. Following those permits within the CHZ, resources will be further prioritized to

allotments within the IHZ with breeding habitats that have decreasing lek counts. (See Flow Chart below). Sage-grouse populations that are stable or trending upward will be a lower priority for permit renewal and the assessment process.

Typically, summer habitats will be managed to provide the conditions described in Table 3; winter Table 4; and breeding habitats in Table 5. However, the assessment/determination process must rely on published characteristics of sage-grouse habitat and the Ecological Site Descriptions, existing vegetation, habitat inventories/assessments (Stiver et al. 2010), and where available, state and transition models that describe vegetation and other physical attributes for sage-grouse. The related characteristics within the categories shown below will also be included. These characteristics indicate the ability of a given area to provide sage-grouse habitat.

Category 1: The grazing allotment (or any pasture/significant area therein) has the existing vegetation and/or existing ecological condition (seral state) to provide sage-grouse habitat

Category 2: The grazing allotment (or any pasture/significant area therein) has the ecological potential to provide sage-grouse habitat.

If the process and conditions outlined above demonstrate that livestock grazing is limiting achievement of the habitat characteristics (Tables 3-5), renewed permits will include measures, including but not limited to the actions outlined in (J), to achieve desired habitat conditions. These measures must be tailored to address the specific management issues.

Additionally, adaptive management changes related to existing grazing permits should only be undertaken if improper grazing is determined to be the causal factor in not meeting habitat characteristics, specific to site capability, based upon monitoring over time with appropriate site variability.

Table 3. General Characteristics of Late Brood Rearing Habitat.

Habitat Features	Habitat Indicators	Habitat Characteristics	
		Upland Sagebrush Communities	Riparian/Wet Meadow Communities
Protective Cover	Sagebrush Canopy Cover	10-25%	N/A
	Sagebrush Height	16-31 inches	N/A

	Sagebrush Proximity	N/A	Protective sagebrush cover (10-25%) is within 300 m of riparian/meadow feeding area.
Protective Cover and Food	Grass/forb canopy cover	>15%	N/A
Food	Forb Availability	Succulent forbs are available during the summer. Generally applies to higher elevations, such as mtn. big sage sites.	Riparian and wet meadow conditions are such that succulent forbs are available during the summer.

Table 4. General Characteristics of Winter Habitat.

Habitat Features	Habitat Indicators	Habitat Characteristics
Protective Cover and Food	Sagebrush Canopy Cover	10-30% exposed above snow
	Sagebrush Height	10-14 inches exposed above snow

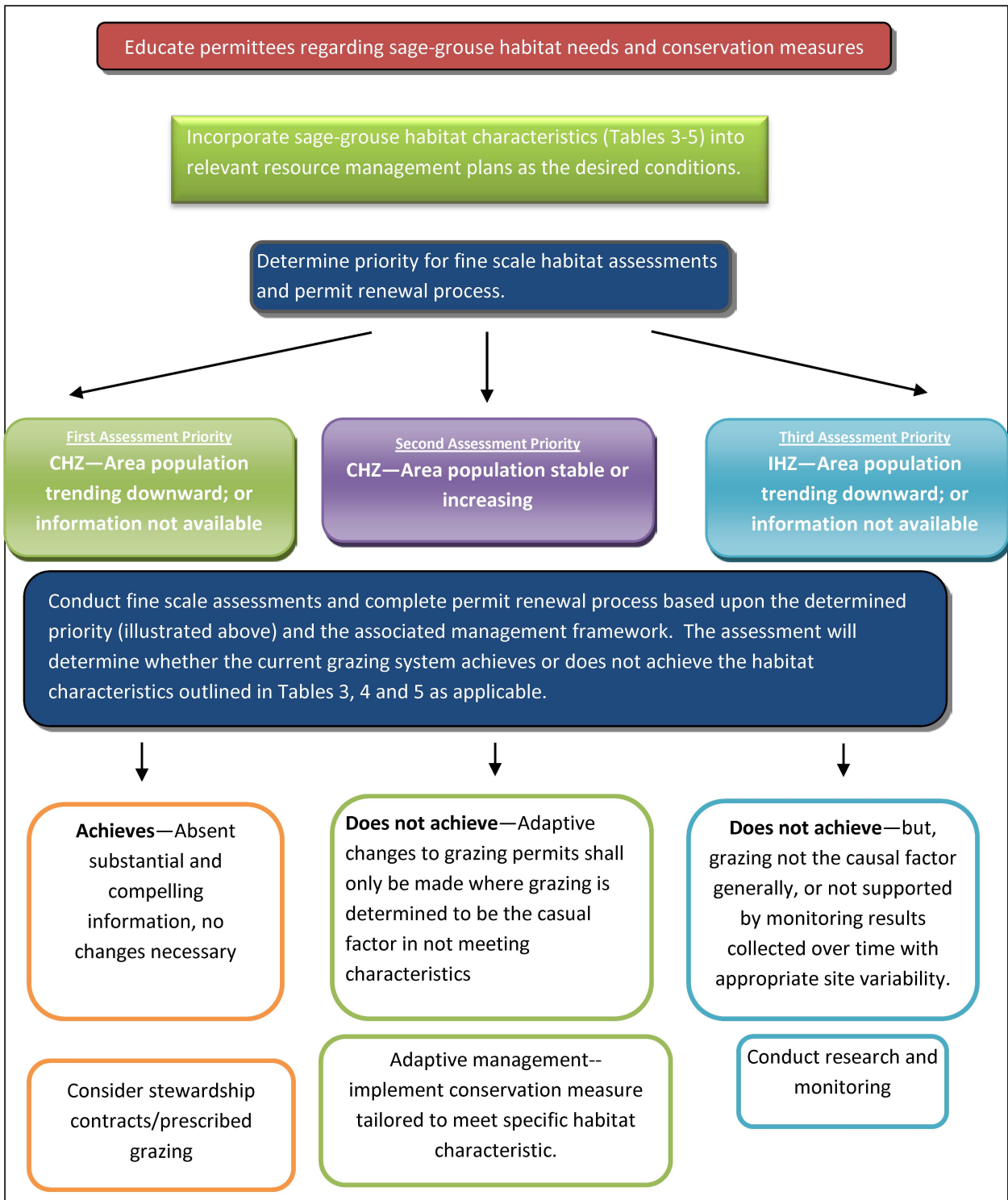
Table 5. General Characteristics of Productive Breeding/Nesting and Early Brood Rearing Habitat.

Habitat Features	Habitat Indicators	Habitat Characteristics	
		Arid Sites	Mesic Sites
Protective Cover	Sagebrush Canopy Cover	15-25%	15-25%
	Sagebrush Height	12-31 inches	16-31 inches
	Sagebrush Growth Form	Spreading	Spreading
	Perennial Grass/Forbs Heights (post hatch)	Adequate residual nesting cover ²	
	Perennial Grass Canopy Cover	Not specified	>15%
Protective Cover and Food	Forb Canopy Cover	Not specified	>10%
	Total Grass/Forb Cover	>15%	>25%

² As defined by Connelly et al. 2000, Hausleitner 2003, and Holloran et al. 2005.
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Food	<div>Forb Availability</div> <div>Good abundance and availability relative to ecological site potential</div>
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Figure 3. Livestock Grazing Management in CHZ and IHZ



J. Implementation of Idaho's Alternative

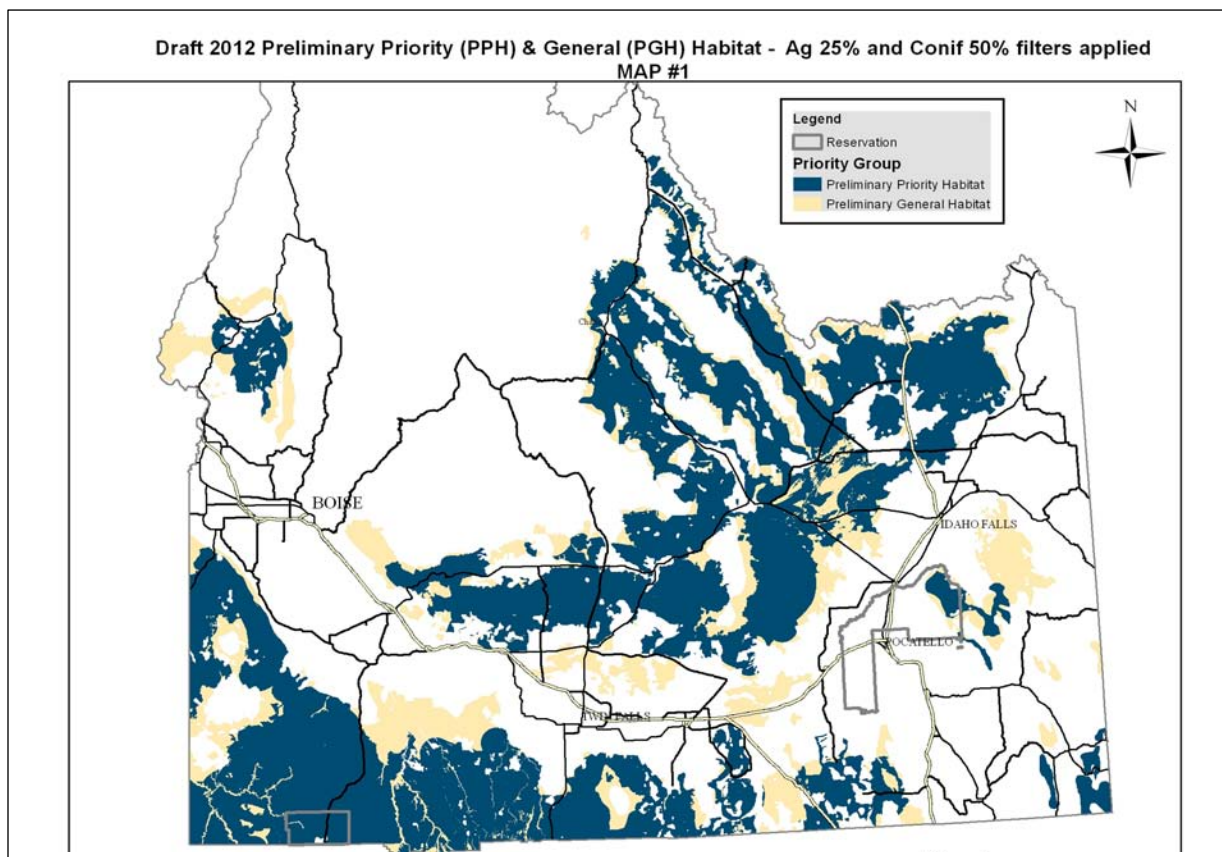
The Governor's Task Force has been a good model of collaborative problem-solving and decision-making. Should Idaho's Alternative be selected and incorporated into relevant resource management plans, I intend to establish by Executive Order an Implementation Task Force to ensure the intent of the State's Alternative is properly implemented. Specifically, the newly-formed group will examine situations where project proponents attempt to develop new infrastructure in the CHZ using the exemption process as described below; and whether proposed projects comply with the criteria outlined in the IHZ. This implementation model has proven successful in implementing the Idaho Roadless Rule.

Additionally, a key component to this alternative is adaptive management. While the State firmly believes the regulatory measures and other features of the plan effectively preclude the need to list, there is a need to continuously evaluate new information as it becomes available. For example, the U.S. Forest Service's research on *Pyrenophora semeniperda* ("black fingers of death") has shown effectiveness in eliminating the cheatgrass carryover seed. The State strongly encourages the Federal government to continue its research on this topic, and may modify this plan to make the application of this tool as an integral part of fire suppression.

II. IDAHO'S SAGE-GROUSE MANAGEMENT AREA (SGMA)

As mentioned previously, the State is adopting the designation of the SGMA with three distinct management zones CHZ, IHZ and GHZ. Recognizing and identifying distinct management zones within the SGMA enables the State and the Federal government to prioritize conservation and restoration efforts to those areas that provide the most effective opportunities to benefit sage-grouse populations and their habitat while maintaining predictable levels of land use. **Map 1**, as developed by the BLM, depicts two habitat areas and provided the Task Force with an initial starting point for discussions.

Map 1. Idaho Sage-Grouse Preliminary “Priority” and “General” Habitat Areas.

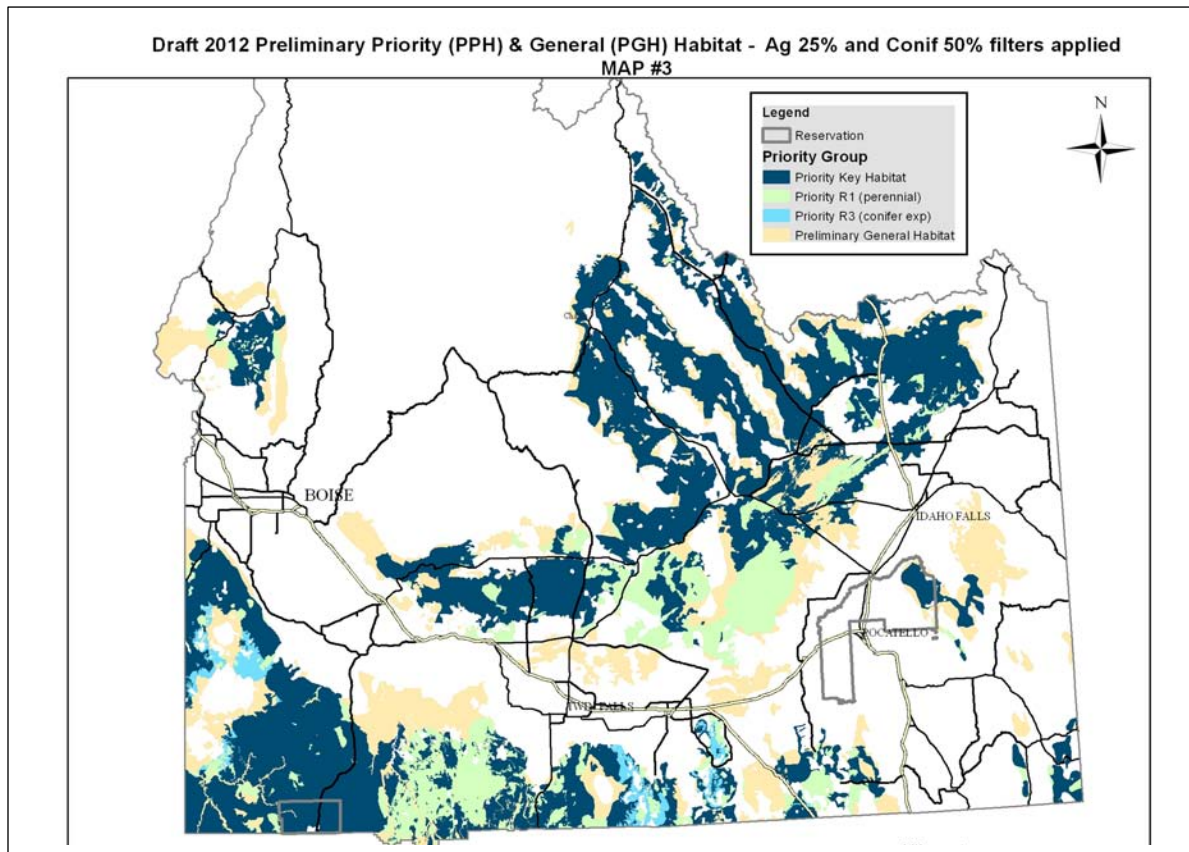


The two habitat areas in **Map 1** are referred to as preliminary “priority” habitat (“PPH”) and preliminary “general” habitat (“PGH”). BLM defines PPH as those areas having the highest conservation value to maintaining greater sage-grouse populations, while PGH is defined as areas of occupied seasonal or year-round habitat outside of “priority” habitat. (Makela and Major 2012).

The State believes this mapping approach fosters an “in or out” management regime that does not adequately take advantage of the opportunity to provide better and more precise management direction based on the quality and location of sage-grouse populations and habitats in Idaho.

The need to refine habitat areas for Idaho-specific management purposes led to the development of **Map 2**. It improves on **Map 1** by differentiating three different vegetative types within the “priority” habitat areas: sagebrush, perennial grasses and conifer encroachment. The latter two types offer opportunities for restoration of sagebrush habitat for the species.

Map 2. Refined Idaho Sage-Grouse Areas.



For the development of Idaho's Alternative, I am adopting the Task Force's creation of the SGMA and the three management zones: CHZ, IHZ and GHZ. These are depicted on **Map 3**.

Map 3. Idaho SGMA Habitat Zones.

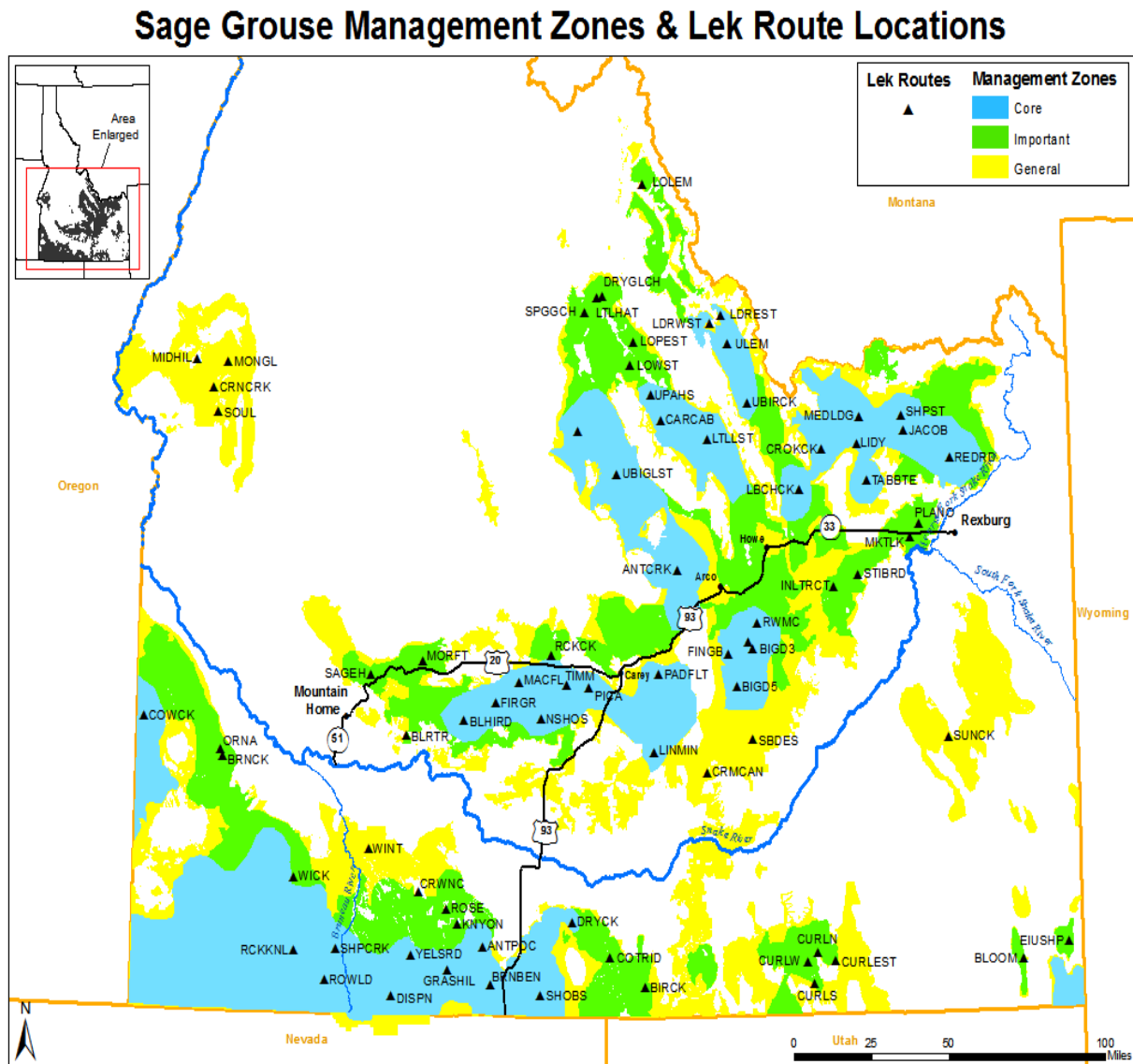


Table 6. Map 3 Lek Legend

Map Label	Lek Route Name	Map Label	Lek Route Name
ANTCRK	Antelope Creek	LOWST	Lower Pahsimeroi West
ANTPOC	Antelope Pocket	LTLHAT	Little Hat Creek
BIGD3	Big Desert #3	LTLST	Little Lost
BIGD3	Big Desert #3	MACFL	Macon Flat
BIGD5	Big Desert #5	MEDLDG	Medicine Lodge
BIGD5	Big Desert #5	MIDHIL	Midvale Hill
BIRCK	Birch Creek	MIDMTN	Middle Mountain
BLHIRD	Bliss-Hill City Road	MKTLK	Market Lake
BLOOM	Bloomington	MONGL	Monday Gulch
BLRTR	Blair Trail	MORFT	Mores Flat
BRNBEN	Brown's Bench	NSHOS	North Shoshone
BRNCK	Brown's Creek	ORNA	Oreana
CARCAB	Carlson Cabin	PADFLT	Paddelford Flat
COTRID	Cottonwood Ridge	PICA	Picabo
COWCK	Cow Creek	PLANO	Plano
CRMCAN	Cream Canyon	RCKCK	Rock Creek
CRNCRK	Crane Creek	RCKCK	Rock Creek
CROKCK	Crooked Creek	RCKKNL	Rocky Knoll
CRWNC	Crow's Nest - Clover	REDRD	Red Road
CURLEST	Curlew East	ROSE	Roseworth
CURLN	Curlew North	ROWLD	Rowland Road
CURLS	Curlew South	RWMC	RWMC/INL
CURLW	Curlew West	SAGEH	Sagehen Flat
DISPN	Dishpan	SBDES	South Big Desert
DRYCK	Dry Creek	SHOBS	Shoshone Basin
DRYGLCH	Dry Gulch	SHPCRK	Sheep Creek
EIUSHP	EIU Sheep Creek	SHPST	Sheep Station
FINGB	Fingers Butte	SOUL	Soulen Center
FIRGR	Fir Grove	SPGGCH	Spring Gulch
GRASHIL	Grassy Hills	STIBRD	Stible Road
INLTRCT	INL/Tractor Flat	SUNCK	Sunday Creek
JACOB	Jacoby	TABBTE	Table Butte
KNYON	Kinyon	TIMM	Timmerman
LBCHCK	Lower Birch Creek	UBIGLST	Upper Big Lost
LDREST	Leadore East	UBIRCK	Upper Birch Creek
LDRWST	Leadore West	ULEM	Upper Lemhi
LIDY	Lidy	UPAHS	Upper Pahsimeroi
LINMIN	Lincoln/Minidoka	WICK	Wickahoney
LOLEM	Lower Lemhi	WINT	Winter Camp
LOPEST	Lower Pahsimeroi East	YELSRD	Yellow Sign Road

In sum, the CHZ and IHZ on **Map 3** total approximately 9.770 million acres, account for ninety percent (90%) of the known leks or breeding display areas in Idaho, and are believed to harbor the vast majority of the State's sage-grouse populations. Evidence for this includes census data that ninety-five percent (95%) of the male sage-grouse counted at leks are in these two zones. By contrast, the GHZ encompasses approximately 5.45 million acres, on which are found ten percent (10%) of the known leks and five percent (5%) of the male sage-grouse attending leks. Thus, the GHZ is the lowest priority for conservation or restoration efforts.

The three management zones within the SGMA take into account the distribution of sage-grouse populations in Idaho. Specifically, the CHZ and IHZ focus on protecting each of the two key meta-populations in the State. These meta-populations consist of a large aggregation of

interconnected breeding subpopulations of sage-grouse that have the highest likelihood of long-term persistence. One meta-population is located north of the Snake River and includes the North Magic Valley, Big Desert, and Basin and Range areas; the other is located south of the Snake River and includes south central Idaho, the upper Bruneau-Jarbridge Plateau, and the Owyhee Uplands.

Approximately sixty-five percent (65%) of the SGMA is administered by the BLM, and another seven percent (7%) by the USFS. Any proposed actions on lands managed by the Federal government, regardless of the management zone such projects may fall in, will still require appropriate site-specific environmental analysis under the National Environmental Policy Act (“NEPA”) and any requisite site-specific decision-making, e.g. 43 C.F.R. Subpart 4160 (BLM) and 36 C.F.R. Part 251 (USFS) prior to approving proposed management actions.

Additionally, applicable resource management plan components must be followed during the planning and implementation of a project. For example, infrastructure development within the GHZ does not contain any special conservation measures for sage-grouse. However, within this management theme, some resource management plan components set sideboards or conditions for development. In particular, there may be other species listed under the ESA that mandates direction to reduce or minimize adverse effects. This direction is not inconsistent with this Alternative. Therefore, these consistent conditions would still apply to actions permissible under the Alternative and if the project cannot comply with the plan requirements, the proposed project would have to be modified, abandoned, or the specific plan component amended.

In addition to the overall desired conditions and ecosystem characteristics discussed earlier, this management zone addresses the following general conditions and uses.

III. IDAHO’S MANAGEMENT ZONES

A. CHZ

Current Condition: The CHZ encompasses approximately 5.68 million acres and supports the highest breeding densities of sage-grouse in Idaho. These areas include approximately sixty-five percent (65%) of the known active leks and are occupied by approximately seventy-three percent (73%) of male sage-grouse counted at leks throughout the SGMA. This management theme represents, and generally exceeds, the State’s base population objective for the species.

The CHZ represents strongholds for sage-grouse populations in Idaho and supports the largest populations. Thus, this zone should represent the highest priority for conservation efforts and policies to address the primary threats to the species, such as wildfire, as described in the Service’s 2010 listing determination.

Areas designated within the CHZ were mapped based on the following key data sets:

Twenty-five (25%) and fifty (50%) breeding bird density classes, which represent the top fifty (50%) of all leks in terms of male attendance, buffered at times by portions of the seventy-five (75%) class, depending on location, and the top two categories of the BLM's connectivity and persistence model (Makela and Major).³ The lek connectivity model estimates the likelihood that those leks or population are likely to persist through time (Knick and Hanser 2011).

Depending on location, additional lands beyond the 25% and 50% thresholds have been included in the CHZ to consolidate key breeding areas, to include wilderness areas and lands within national monuments, and to foster population connectivity with neighboring states. The State recognizes that these are fluid boundaries because the habitat is not static, and as new information regarding the species becomes available, it may be necessary to adjust the boundaries for the three management zones.

Desired Future Condition: Maintaining or improving the status of the species within this management zone requires Federal agencies, in conjunction with the State and local partners, to work collaboratively to increase the resiliency of the habitat to disturbances, such as wildfire, and limit habitat fragmentation and loss only to projects pursuant to valid existing rights or incremental upgrades and/or that demonstrate, among other things, a significant high value benefit to the State of Idaho as well as provide compensatory mitigation consistent with the guiding principles above.

Management Focus: Management by Federal agencies should focus on the maintenance and enhancement of the habitats, population and connectivity areas identified in this zone.

Federal agencies need to marshal existing—and target future Federal resources—to reduce the number and size of wildfires, especially in the West Owyhee Conservation Area.

Idaho landowners and sage-grouse local working groups have already invested significant efforts in the CHZ and should continue to be informed and involved as these recommendations are refined and implemented. The State encourages local landowners to continue practices that aid in meeting conservation objectives for the CHZ.

³ In 2010, the BLM entered into an agreement with the Service to model sage-grouse “breeding bird density” (“BBD”) at three scales: across the range of the species; by WAFWA sage-grouse zones; and by State (Doherty et al. 2011). The BBD analyses involve ranking leks by attendance (i.e., highest to lowest number of males counted on leks) and summing the number of males until a desired percent-population threshold is met, hence the categories used—top 25%, 50%, 75% and 100% of the population.

Table of Generally Suitable Uses and Activities in CHZ⁴

Use/Activity	Yes	No	Conservation Measures
Fire Management	X		Only human safety and structure protection shall take precedence.
Invasive Species	X		Actively manage exotic undesirable species sufficiently to prevent invasion.
Infrastructure		X	Limited exceptions are permissible.
Recreation	X		Prioritize the completion of comprehensive travel planning.
Livestock Grazing	X		Prioritize allotments for permit renewal and assessment process for allotments with declining sage-grouse populations.

As illustrated in the table above, prospective infrastructure development authorized by the State Director is presumptively prohibited unless conducted pursuant to valid existing rights or as part of an incremental upgrade. The Task Force also recommended that a limited exemption process should be available to facilitate limited situations where a project proponent can satisfy stringent criteria and provide compensatory mitigation. It is important to note that a proponent would have to meet all the criteria outlined in the regulatory language.

⁴ This table, along with the successive tables for each management zone, is for general illustrative purposes only. *See* Section V for Idaho's Alternative regulatory language for a complete understanding of the prohibitions and permissions for each management zone.

As the Task Force recommended, one of the key criterion for obtaining an exemption was a project proponent's demonstration that the project would provide a high-value benefit to meet critical existing needs and/or important societal objectives to the State of Idaho. In the draft Alternative, several commenters noted a discomfort with having federal officials determine what projects meet the exemption criteria. Because this Alternative is aimed at providing special management direction for sage-grouse on lands managed by the Federal government, the State does not have the authority to make land allocation decisions. More specifically, these commenters argued that these same Federal officials are not well-positioned to determine whether a project under this exemption provides a "high value" benefit to the State.

The State agrees with this line of reasoning. Thus, the factor is retained as part of the analysis, and should this Alternative be implemented, the State intends as part of the Implementation Commission to evaluate this factor as part of its responsibility to provide the Governor recommendations on site-specific projects developed through this plan.

Recognizing that maintaining and improving sage-grouse populations within the CHZ is important to the State's overall population objective, the balance between the economic value of future infrastructure projects and conserving the species to prevent an ESA listing clearly tilts in favor of the species within this the management zone. That said, it is impossible to predict projects that could be important to the economic vitality of the State in the future. Thus, the "high value" evaluation by the Implementation Commission will be critical in balancing these interests.

B. IHZ

Current Condition: The IHZ encompasses approximately 4.09 million acres. These areas include approximately twenty-five percent (25%) of the known active leks and are occupied by an estimated twenty-two percent (22%) of sage-grouse males. This management zone generally captures high-quality habitat and populations necessary for providing a management buffer for the CHZ, connecting patches of the CHZ, and supporting important populations and habitat independent of the CHZ.

The IHZ is primarily defined by the seventy-five (75%) breeding bird density areas. Given the migratory life history of many sage-grouse populations, a portion of the birds breeding in CHZ may make seasonal use of areas within the IHZ. The IHZ also includes areas of value for migration corridors, connectivity among breeding areas, and long-term persistence of each of the two key meta-populations of sage-grouse in Idaho.

Desired Future Condition: Maintaining or improving the status of the species within this management zone requires Federal agencies, in conjunction with the State and local partners, to work collaboratively to increase the resiliency of the habitat to disturbances, such as fire, and

limit unnecessary and undue habitat fragmentation to projects that demonstrate, among other things, a high value benefit to the State of Idaho.

Management Focus: Management by Federal agencies should focus strategically on areas within this zone that have the best opportunities for conserving, enhancing or restoring habitat for sage-grouse. Management by Federal agencies should employ more aggressive wildfire and invasive species management practices to prevent further encroachment of these two primary threats into the CHZ. The IHZ should also afford project proponents greater flexibility than in the CHZ with the understanding that the project still must demonstrate, among other things, a high value benefit to the State.

Table of Generally Suitable Uses and Activities in IHZ

Use/ Activity	Yes	No	Conservation Measures
Fire Management	X		Where appropriate, develop more aggressive strategies to reduce fuel loads.
Invasive Species	X		Actively manage exotic undesirable species to prevent invasion in the CHZ without impairing sage-grouse populations.
Infrastructure	X		Permissible subject to certain criteria. Mitigate unavoidable impacts.
Recreation	X		Same as CHZ.
Livestock Grazing	X		Same as CHZ.

C. GHZ

Current Condition: The GHZ encompasses approximately 5.45 million acres. This management zone generally includes few active leks, and fragmented or marginal habitat. The GHZ also includes habitat for two isolated populations of sage-grouse in the East Idaho Uplands and West Central Idaho. While these two areas generally represent better habitat than the remainder of the GHZ, the isolated nature of these populations make it unlikely that they will contribute to the long-term persistence of the two key meta-populations in the State of Idaho. Thus, local working group efforts will be key in these areas.

Desired Future Condition: Rely on efforts of local working groups to maintain populations where applicable.

Management Focus: Management by Federal agencies should focus, to the extent practicable, on facilitating multiple-use activities in order to avoid siting conflicts in the other management zones. Management by Federal agencies should employ a more aggressive wildfire and invasive species management practices to prevent further encroachment of these two primary threats into the CHZ/IHZ.

Table of Generally Suitable Uses and Activities in GHZ

Use/Activity	YES	NO	Conservation Measures
Fire Management	X		Aggressive fire suppression techniques should be utilized.
Invasive Species	X		Employ aggressive invasive species measures in conjunction with CWMAs.
Infrastructure	X		Consistent with local resource management plans.
Recreation	X		No special application for sage-grouse.
Livestock Grazing	X		No special application for sage-grouse.

IV. COOPERATING AGENCY STATUS

The State of Idaho formally requests cooperating agency status in this process. The Governor's Office of Species Conservation in conjunction with IDFG will serve as the State's

representatives in this process. The Task Force will continue to serve in an advisory capacity to ensure the State's Alternative is properly analyzed.

V. IDAHO'S REGULATORY LANGUAGE FOR LANDS MANAGED BY THE FEDERAL GOVERNMENT

A. Purpose.

The purpose of this Alternative is to provide, in the context of multiple-use management, Idaho-specific direction for the conservation and management of the greater sage-grouse in lands administered by the Bureau of Land Management and the U.S. Forest Service.

B. Definitions.

The following terms and definitions apply to Idaho's Alternative:

Adaptive Regulatory Triggers: Provides a regulatory backstop where a significant and unanticipated loss of sage-grouse habitats and populations occurs by applying the conservation benefits of the CHZ to the IHZ within the relevant Conservation Area.

Infrastructure: Discrete, large-scale anthropogenic features, including but not limited to, highways, high voltage transmission lines, commercial wind projects, energy development (e.g., oil and gas development, geothermal wells), airports, mines, cell phone towers, landfills, residential and commercial subdivisions. Infrastructure related to small-scale ranch, home and farm businesses, including but not limited to, stock ponds, fences, range improvements do not meet this definition and are addressed in other portions of the Alternative or relevant resource management plans.

Sage-Grouse Management Objective for the State of Idaho: Maintain and enhance the habitat and populations of sage-grouse located within the Core Habitat Zone ("CHZ"), while strategically buffered by areas within the Important Habitat Zone ("IHZ") having the best opportunities for conserving, enhancing or restoring habitat for sage-grouse. In the first three years of implementation, the approach will emphasize limiting habitat loss in the CHZ and IHZ respectively to no more than ten percent (10%) resulting in a proportionate reduction of males counted on leks within an individual Conservation Area.

Sage-Grouse Management Area: The Sage-Grouse Management Area ("SGMA") pursuant to this Alternative identified in **Map 3** that accounts for the entire known sage-grouse population in the State of Idaho.

State Director: The Idaho State Director for the Bureau of Land Management ("BLM"). Where relevant and appropriate, the term "State Director" also means "Regional Forester" for lands subject to the management of the U.S. Forest Service.

C. SGMA.

1. *Designations.* All relevant National Forest System lands and BLM lands as designated in **Map 3** are hereby designated as the SGMA. Notwithstanding the need to make technical corrections, absent substantial and compelling evidence, these designations pursuant to **Map 3** should not be altered for at least five (5) years.
2. *Management Classifications.* Management classifications for the SGMA express a management continuum. The following classifications are established: Core Habitat Zone (“CHZ”), Important Habitat Zone (“IHZ”) and General Habitat Zone (“GHZ”).
3. *Conservation Areas.* In order to achieve the State’s Management Approach, the following Conservation Areas are established: West Owyhee Conservation Area; Southern Conservation Area; Desert Conservation Area; and Mountain Valleys Conservation Area.
4. *Maps.* The State Director and the Director of the Idaho Department of Fish and Game shall maintain and make available to the public a map of the SGMA, including records regarding any corrections or modifications of such maps pursuant to this Alternative.

D. CHZ. Management by Federal and State agencies should focus on the maintenance and enhancement of habitats, populations and connectivity in areas within this management zone.

1. *Wildfire*
 - i. Incorporate the BLM Washington Office Instruction Memorandum (“WO IM”) 2011-138 to reduce the number and size of wildfires in sage-grouse habitat.
 - ii. Only human safety and structure protection shall take precedence over the protection of sage-grouse habitat.
 - iii. Evaluate and decrease wildfire response time by twenty-five percent (25%). In order to achieve this objective:
 - a. Prioritize, maintain and improve a high initial attack success rate in suppression response and staging decisions;
 - b. Utilize available maps under (C)(4) and spatial data depicting sage-grouse habitats within this zone;
 - c. Redeploy firefighting resources not being fully utilized outside the SGMA to the extent such redeployment will not cause harm to human safety and structure protection; and
 - d. Request the necessary federal appropriations to achieve this objective.

- iv. Evaluate the current fire suppression baseline, and in conjunction with the measures below, develop a consistent plan that improves on this baseline by twenty-five percent (25%).
 - a. Federal firefighters shall ensure close coordination with State firefighters, local fire departments and local expertise to create the best possible network of strategic fuel breaks and road access to minimize and reduce the size of a wildfire following ignition;
 - b. To the extent practicable, the close coordination described in (a) should result in consistent fire response plans and mutual aid agreements necessary to achieve the management objective in (iv);
 - c. Request and place additional firefighting resources and establish new Incident Attack Centers, with particular emphasis in the West Owyhee Conservation Area;
 - d. Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness according to the following criteria:
 - Target establishment of fuel breaks along existing roads or other disturbances.
 - Identify and target higher-risk roads for fuel break construction and maintenance based on fire history maps.
 - Implement a strategic approach to using these roads for rapid fire response.
 - Analyze the benefits of the fuel break against the additional loss of sagebrush cover and risk on invasive weeds.
 - Fire breaks must be properly maintained.
 - e. Request the necessary federal appropriations to achieve this objective.

2. *Invasive Species*

- i. Actively manage exotic undesirable species to limit presence.
- ii. Monitor and control invasive vegetation post-wildfire treatment for at least three years.
- iii. Emphasize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success.

- a. Reallocate native plant seeds for Emergency Stabilization and Rehabilitation (ES&R) from outside the SGMA and the GHZ to this management zone if necessary.
 - b. Where the probability of obtaining sufficient native seed is low, non-native seeds may be used provided sage-grouse habitat objectives are met.
- 3. *Habitat Restoration*
 - i. Prioritize the removal of conifers through methods appropriate for the terrain and most likely to facilitate expeditious sage-grouse population and habitat recovery. To the extent possible, utilize removal methods creating the least amount of disturbance.
 - a. Efforts should focus on areas with highest restoration potential typically evidenced by low canopy cover, existing sagebrush understory, and adjacent current populations.
 - b. Refrain from using prescribed fire and conducting removal projects in juniper stands older than one hundred years.
 - c. Maximize the use of Natural Resource Conservation Service funding through permittee grants under the Environmental Quality Incentives Program (EQUIP) and Wildlife Habitat Improvement (WHIP) programs.
 - ii. In perennial grasslands, actively restore sagebrush canopy cover and the ecological functions of the site. To the extent practicable, utilize native understory.
 - a. Prioritize areas for restoration with lower risks of wildfire and exotic species invasion.
- 4. *Infrastructure*
 - i. The development of infrastructure authorized after the effective date of the record of decision in areas designated as CHZ is prohibited, except if developed pursuant to valid existing rights or incremental upgrade and/or capacity increase of existing development (authorized prior to the record of decision) subject to best management practices in (G).
 - a. Impacts of proposed actions authorized in (i) shall be limited to the authorized existing footprint with no more than a fifty percent (50%), depending on industry practice, increase in footprint size and associated impacts; and
 - b. Projects authorized under (i) would only be subject to compensatory mitigation if new significant and unavoidable impacts are demonstrated to be associated with the project.

- ii. Notwithstanding the limited prohibition in (4)(i), the State Director may authorize infrastructure development only in situations where the development:
 - a. Cannot be reasonably accomplished outside of the CHZ; and
 - b. Demonstrates the population trend for the species within the relevant Conservation Area is stable or increasing over a three-year period; and
 - c. Demonstrates the individual or cumulative exceptions under this provision must best reduce habitat fragmentation ensuring the impacts will not accelerate and/or cause a population decline of the species within the relevant Conservation Area; and
 - d. Co-locate with existing infrastructure to the maximum extent practicable; and
 - e. Shall mitigate unavoidable impacts through an appropriate compensatory mitigation plan.
 - iii. Proposed development authorized under (4)(ii) are subject to the applicable best management practices in (G).
 - iv. Notwithstanding the limited prohibition in 4(i), the State Director may authorize, after the record of decision, oil and gas development only under the following circumstances:
 - a. Exploration activities utilizing temporary roads are permissible provided site disturbance is minimized.
 - b. There shall be no surface use or occupancy unless the State Director finds that the surface development, based on site-specific analysis, will not accelerate and/or cause declines in sage-grouse populations within the relevant Conservation Area based on the application of the criteria in 4(ii) and the best management practices in (G).
5. *Secondary Threats*
- i. *Recreation*
 - a. Prioritize the completion of Comprehensive Transportation Management Travel Plans (“CTMTs”) to minimize disturbance to sage-grouse populations and reduce the risk of wildfire and other habitat disturbances associated with cross-country travel.
 - b. Prior to the completion of CTMTs, restrict vehicles to existing routes.

- c. Adopt a “restricted to designated routes” approach where appropriate to the extent such designation does not interfere with administrative use.
 - d. Discourage the creation of new roads and trails. Re-route existing routes where appropriate.
 - e. Identify and reduce activities demonstrating repeated displacement of nesting birds. Where existing routes are demonstrated to affect occupied leks, apply seasonal and time based use-restrictions tailored to address the site-specific conditions of the area.
- ii. *West Nile Virus*
 - a. Reduce the risk of transmission of West Nile Virus to sage-grouse by minimizing the creation of breeding habitat for mosquitoes.
 - b. Consider the potential impacts of West Nile Virus transmission prior to permitting new ponds or reservoirs.
 - c. Minimize the construction of new ponds or reservoirs except as needed to meet important resource management and/or restoration objectives.
 - d. Non-pond/reservoir watering facilities, such as troughs and bottomless tanks, should be developed and maintained to provide high quality water that minimizes the development of habitat for mosquitoes.
 - e. Maintenance of functioning float valves and water return features should be constructed to prohibit water from being spilled on the ground surrounding the trough and/or tank.
 - f. To the extent practicable, water should be returned to the original water source to reduce suitable habitat for mosquitoes.
- iii. *Livestock Grazing Management*
 - a. Incorporate the sage-grouse habitat characteristics in **Tables 3-5** and management considerations into relevant resource management plans as desired conditions recognizing that these conditions may not be achievable (1) due to the existing ecological condition, ecological potential, or the existing vegetation; or (2) due to casual events unrelated to existing livestock grazing.
 - b. Prioritize permit renewal and the land health assessments outlined in (iii)(c) in allotments with declining sage-grouse populations.

- c. Conduct fine and site scale-habitat assessments and, where appropriate, a determination of factors causing any failure to achieve the habitat characteristics in Tables 3-5. The assessment(s) shall be conducted at a resolution sufficient to document the habitat condition and will include local spatial and inter-annual variability. Any determination relative to the habitat characteristics (Tables 3-5) shall be based upon existing ecological condition, ecological potential, and existing vegetation information to ensure the assessment recognizes whether or not these habitat characteristics are achievable.
 - d. The assessment will rely on published characteristics of sage-grouse habitat and the Ecological Site Descriptions, and **Tables 3-5**, and where available and applicable, rangeland health determinations made in accordance with 43 C.F.R. 418.2(c).
 - e. After conducting the assessment in (iii)(c), if the current grazing system achieves the habitat characteristics (Tables 3-5), absent substantial and compelling information no further grazing management changes are necessary.
 - f. If the process and conditions outlined in (iii)(c) demonstrate that livestock grazing is limiting achievement of the habitat characteristics (Tables 3-5), renewed permits will include measures, including but not limited to the actions outlined in (J), to achieve desired habitat conditions. These measures must be tailored to address the specific management issues.
 - g. Adaptive management changes related to existing grazing permits should only be undertaken where improper grazing is determined to be the casual factor in not meeting habitat characteristics, specific to site capability, based upon monitoring over with appropriate spatial variability.
 - h. Where management changes are needed and necessary pursuant to (f), implement management actions that are narrowly tailored to address the specific habitat objective applied at the allotment and/or activity plan level, including but not limited to the actions outlined in (J).
- iv. *Livestock Grazing Infrastructure*
- a. To the extent practicable, reduce the impacts of fences and livestock management facilities on sage-grouse.

- b. Mark fences with permanent flagging or other suitable device to reduce sage-grouse collisions on flat to gently rolling terrain in areas of moderate to high fence densities (i.e., more than one kilometer of fence per square kilometer) located within two kilometers of occupied leks.
- c. Identify and remove unnecessary fences.
- d. Placement of new fences and livestock management facilities, including corrals, loading facilities, water tanks and windmills, should consider their impact on sage-grouse.
- e. Avoid constructing new fences within one kilometer (0.6 miles) of occupied leks.
- f. To the extent practicable, place new, taller structures, including corrals, loading facilities, water storage tanks, windmills, at least one kilometer from occupied leks.

E. IHZ. Management by Federal and State agencies should focus on areas within this zone that have the best opportunities for conserving, enhancing or restoring habitat for sage-grouse. Management by Federal agencies should also provide the necessary flexibility to permit high-value infrastructure projects.

1. *Wildfire*

- i. Incorporate the BLM WO IM 2011-138 to reduce the number and size of wildfires in sage-grouse habitat.
- ii. Only human safety and structure protection shall take precedence over the protection of sage-grouse habitat.
- iii. Evaluate and decrease wildfire response time by twenty percent (20%) in the West Owyhee Conservation Area. Decrease wildfire response time in all other conservation areas by fifteen percent (15%). In order to achieve this objective:
 - a. Prioritize, maintain and improve a high initial attack success rate in suppression response and staging decisions;
 - b. Utilize available maps under (C)(4) and spatial data depicting sage-grouse habitats within this zone;
 - c. Redeploy firefighting resources not being fully utilized outside the SGMA to the extent such redeployment will not cause harm to human safety and structure protection; and
 - d. Request the necessary federal appropriations to achieve this objective.

- iv. Evaluate the current fire suppression baseline, and in conjunction with the measures below, develop a management plan that improves on this baseline by fifteen percent (15%).
 - a. Federal firefighters shall ensure close coordination with State firefighters, local fire departments and local expertise (i.e., livestock grazing permittees and road maintenance personnel) to create the best possible network of strategic fuel breaks and road access to minimize and reduce the size of a wildfire following ignition;
 - b. To the extent practicable, the close coordination described in (a) shall result in consistent fire response plans and mutual aid agreements necessary to achieve the objective in (1)(v); and
 - c. Request the necessary federal appropriations to achieve this objective.
 - v. Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness.
 - a. Target establishment of fuel breaks along existing roads or other disturbances.
 - b. Identify and target higher-risk roads for fuel break construction and maintenance based on fire history maps.
 - c. Implement a strategic approach to using these roads for rapid fire response.
 - d. Closely evaluate the benefits of the fuel break against the additional loss of sagebrush cover and risk of invasive weeds.
 - e. Fire breaks must be properly maintained.
 - vi. Prescribe or target livestock grazing where demonstrated to be appropriate as a tool for reducing fuel loads, reducing invasive species populations and maintaining functional fire breaks.
 - a. Test the effectiveness and monitor the results on a site-specific basis through stewardship contracting.
 - vii. Reduce human-caused ignitions by coordinating with Federal, State and local jurisdiction on fire and litter prevention programs.
2. *Invasive Species*
- i. Actively manage exotic undesirable species to limit presence in the CHZ.
 - ii. Monitor and control invasive vegetation post-wildfire treatment for at least three years.

- iii. Emphasize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success.
 - a. Reallocate native plant seeds for Emergency Stabilization and Rehabilitation (ES&R) from outside the SGMA and the GHZ to this management zone.
 - b. Where the probability of success or native seed availability is low, non-native seeds may be used provided sage-grouse habitat objectives are met.
 - iv. Require best management practices for construction projects to prevent invasion.
 - v. Actively pursue eradication or control of noxious weeds and/or invasive species posing a risk to sage-grouse habitats using a variety of chemical, mechanical and other appropriate means in coordination with the local Cooperative Weed Management Area (CWMA).
 - vi. Establish an effective monitoring program to evaluate the success of weed control efforts in conjunction with the CWMAs.
 - 3. *Habitat Restoration*
 - i. Prioritize the removal of conifers through methods appropriate for the terrain and most likely to facilitate expeditious sage-grouse habitat recovery. Especially prioritize and target removal treatments adjacent to the CHZ. To the extent possible, utilize methods creating the least amount of disturbance.
 - a. Areas with highest restoration potential will typically have low canopy cover, existing sagebrush understory, and adjacent current populations.
 - b. Refrain from using prescribed fire and conducting removal projects in juniper stands older than one-hundred years.
 - c. Maximize the use of Natural Resource Conservation Service funding through permittee grants under the Environmental Quality Incentives Program (EQUIP) and Wildlife Habitat Improvement (WHIP) programs.
 - ii. In perennial grasslands, actively restore sagebrush canopy cover and the ecological functions of the site. To the extent practicable, utilize native understory.
 - a. Prioritize areas for restoration with lower risks of wildfire and exotic species invasion, especially in areas adjacent to the CHZ.

4. *Infrastructure*

- i. The State Director may authorize new infrastructure development where in the State Director's judgment the circumstances set out below exist.
 - a. Cannot reasonably be achieved, technically or economically, outside of this management zone; and
 - b. To the extent practicable, co-locate the project with existing infrastructure. In the event co-location is not practicable, the siting should best reduce cumulative impacts and/or impacts to other high value natural, cultural, or societal resources; and
 - c. Should not result in unnecessary and undue habitat fragmentation or other impacts causing a decline in the population of the species within the relevant Conservation Area; and
 - d. Mitigate unavoidable impacts through an appropriate compensatory mitigation plan; and
 - e. Comply with the applicable best management practices in (G).
- ii. For oil and gas leases issued after the effective date of the record of decision, exploration activities utilizing temporary roads shall be exempt, provided site disturbance is minimized. Surface use or occupancy is permissible if projects can demonstrate, based on site-specific analysis, that such activities will not cause declines in sage-grouse populations through implementation of the best management practices in (G). Projects authorized under (ii) must mitigate unavoidable impacts through an appropriate compensatory mitigation plan.

5. *Secondary Threats*

- i. *Recreation*
 - a. Prioritize the completion of Comprehensive Transportation Management Travel Plans ("CTMTPs") to minimize disturbance to sage-grouse and reduce the risk of wildfire and other habitat disturbances associated with cross-country travel.
 - b. Prior to the completion of CTMTPs, restrict vehicles to existing routes.
 - c. Adopt a "restricted to designated routes" approach where appropriate to the extent such designation does not interfere with administrative use.

- d. To the extent practicable, discourage the creation of new roads and trails. Re-route existing routes where appropriate.
 - e. Identify and reduce activities demonstrating repeated displacement of nesting birds. Where existing routes are demonstrated to affect occupied leks, apply seasonal and time based use-restrictions tailored to the site-specific conditions of the area.
- ii. *West Nile Virus*
 - a. Reduce the risk of the transmission of West Nile Virus to sage-grouse by minimizing the creation of breeding habitat for mosquitoes.
 - b. Consider the potential impacts of West Nile Virus transmission prior to permitting new ponds or reservoirs.
 - c. Minimize to the extent practicable, construction of new ponds or reservoirs except as needed to meet important resource management and/or restoration objectives.
 - d. Non-pond/reservoir watering facilities, such as troughs and bottomless tanks, should be developed and maintained to provide high quality water that suppresses development of habitat for mosquitoes.
 - e. Maintenance of functioning float valves and water return features should be constructed to prohibit water from being spilled on the ground surrounding the trough and/or tank.
 - f. To the extent practicable, water should be returned to the original water source to reduce suitable habitat for mosquitoes.
- iii. *Livestock Grazing Management*
 - a. See V.D.5.iii.
- iv. *Livestock Grazing Infrastructure*
 - a. To the extent practicable, reduce the impacts of fences and livestock management facilities on sage-grouse.
 - b. Mark fences with permanent flagging or other suitable device to reduce sage-grouse collisions on flat to gently rolling terrain in areas of moderate to high fence densities (i.e., more than one kilometer of fence per square kilometer) located within two kilometers of occupied leks.
 - c. Identify and remove unnecessary fences.
 - d. Placement of new fences and livestock management facilities, including corrals, loading facilities, water tanks

and windmills, should consider their impact on sage-grouse.

- e. Avoid constructing new fences within one kilometer of occupied leks.
- f. To the extent practicable, place new, taller structures, including corrals, loading facilities, water storage tanks, windmills, at least one kilometer from occupied leks.

F. GHZ. Management by Federal agencies should focus on multiple-use management consistent with local resource management plans.

1. *Wildfire*

- i. Incorporate the BLM WO IM 2011-138 to reduce the number and size of wildfires in sage-grouse habitat.
- ii. Fire suppression efforts should be emphasized, recognizing that other local, regional, and national fire suppression priorities may take precedent.
- iii. Aggressively create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness. The fire breaks should target areas necessary to provide a buffer between the GHZ and the other management zones.
 - a. Target establishment of fuel breaks along existing roads or other disturbances.
 - b. Identify and target higher-risk roads for fuel break construction and maintenance based on fire history maps.
 - c. Implement a strategic approach for using these roads to enable rapid fire response.
 - d. Fuel breaks must be properly maintained and sited with consideration of active leks and risk of invasive weeds.
- iv. Actively employ prescribed or targeted grazing as a primary tool for reducing fuel loads, reducing invasive species populations and maintaining functional fire breaks to the extent such activities do not adversely affect breeding habitats (i.e. occupied leks, nesting and early brood-rearing).

2. *Invasive Species*

- i. Aggressively manage exotic undesirable species sufficient to prevent invasion into other management zones.
- ii. Aggressively pursue eradication or control of noxious weeds and/or invasive species posing a risk to sage-grouse habitats using a variety of chemical, mechanical and other appropriate means in

- coordination with the local Cooperative Weed Management Area (CWMA).
 - iii. Establish an effective monitoring program to evaluate the success of weed control efforts in conjunction with the CWMAs.
 - 3. *Infrastructure*
 - i. A responsible official may authorize infrastructure construction consistent with the relevant land management components as provided for in (H).
 - 4. *Secondary Threats*
 - i. *Recreation*
 - a. Nothing in this Alternative shall be construed as affecting the use of motorized equipment and mechanical transport in this management zone.
 - ii. *West Nile Virus*
 - a. Minimize the creation of breeding habitat for mosquitoes in sage-grouse habitat.
 - b. Prior to permitting new ponds or reservoirs, consider the impacts of West Nile Virus transmission.
 - c. Non-pond/reservoir watering facilities, such as troughs and bottomless tanks should be developed and maintained to provide high quality water that suppresses the development of habitat for mosquitoes.
 - iii. *Livestock Grazing Management*
 - a. Nothing in this Alternative shall be construed as affecting existing grazing permits in this management zone. Grazing permits are still subject to the grazing regulations (43 C.F.R. Part 4100, including Fundamentals of Rangeland Health, 43 C.F.R. Subpart 4160.
 - iv. *Livestock Grazing Infrastructure*
 - a. Identify and remove unnecessary fences.

G. Infrastructure—Best Management Practices.

- 1. For proposed actions authorized in the CHZ and IHZ, the following best management practices are applicable:
 - i. Utilize existing roads, or realignments of existing routes to the extent possible.
 - ii. Construct new roads to minimum design standards needed for production activities.
 - iii. To the extent possible, micro-site linear facilities to reduce impacts to sage-grouse habitats.

- iv. Locate staging areas outside the CHZ to the extent possible.
 - v. To the extent possible, co-locate linear facilities within one kilometer of existing linear facilities.
 - vi. New transmission lines, excluding those lines under (viii), will be deemed co-located and/or permissible if construction occurs between July 1 and March 14 (or between July 1 and November 30 in winter concentration areas) and within one kilometer either side of existing 115-kilovolt (kV) or larger transmission lines to create a corridor no wider than two kilometers.
 - vii. New transmission lines, excluding those lines under (viii), outside of this two kilometer corridor can only be constructed where it can be demonstrated that the activity will not cause declines in sage-grouse populations or if the activity reduces cumulative impacts and/or avoids other important natural, cultural or societal resources.
 - viii. Locate essential public services, including but not limited to, distribution lines, domestic water lines and gas lines, at least one kilometer from active sage-grouse leks. If one kilometer avoidance is not possible, construct lines outside of March 15 to June 30.
 - ix. In addition to the applicable best management practices (i-viii), wind energy development, projects must also comply with the 2012 U.S. Fish and Wildlife Service's Wind Energy Guidelines.
2. For oil and gas leases issued after the effective date of the record of decision, the following best management practices are applicable:
- i. Evaluate the affected area in accordance with the process outlined in the State of Wyoming's Executive Order 2011-5.
 - ii. For development within the CHZ, surface disturbance will be limited to three percent of suitable habitat per an average of 640 acres. Development within the IHZ will be limited to five percent of suitable habitat per an average of 640 acres.
 - iii. There shall be no surface occupancy ("NSO") within one kilometer of the perimeter of occupied sage-grouse leks; provided this distance is supported by the best available science at the time the development undergoes site-specific environmental analysis.
 - iv. Activity (production and maintenance activity exempted) will be allowed from July 1 to March 14 outside of the one kilometer perimeter of a lek where brood rearing, nesting and early brood-rearing habitat is present.

- v. Areas solely used as winter concentration areas, exploration and development activity will be allowed March 14 to December 1.
- vi. Locate main roads used to transport production and/or waste products >1.5 kilometers from the perimeter of occupied sage-grouse leks. Locate other roads used to provide facility site access and maintenance >1.5 kilometers from the perimeter of occupied sage-grouse leks. Construct roads to minimum design standards needed for production activities.
- vii. New noise levels, at the perimeter of a lek, should not exceed 10dBA above ambient noise (existing activity included) from 6:00 PM to 8:00 AM during the initiation of breeding (March 1-May 15). Ambient noise level should be determined by measurements taken at the perimeter of a lek at sunrise.
- viii. Absent some demonstration to the contrary, the proposed sagebrush treatment associated with this activity will not reduce canopy cover to less than 15 percent.

H. Scope and Applicability.

1. This Alternative does not revoke, suspend, or modify any permit, contract, or other legal instrument authorizing the occupancy and use of the applicable Federal lands prior to the effective date of the record of decision and prior to the completion of any statutory or regulatory decision-making process to revoke, suspend, or modify such permit, contract or legal instrument.
2. This Alternative does not revoke, suspend, or modify any project or activity decision made prior to the effective date of the record of decision.
3. Nothing in this Alternative shall be construed as restricting mineral leases, contracts, permits, and associated activities prior to the effective date of the record of decision.
4. Nothing in this Alternative shall affect mining activities conducted pursuant to the General Mining Law of 1872.
5. For the purposes of sage-grouse management, the provisions set forth in this Alternative shall take precedence over any inconsistent land management plan component unless prescribed by statute or regulation. Land management components that are not inconsistent with this Alternative will continue to provide guidance for projects and activities within the SGMA.
6. The best management practices in (G) and other protective stipulations in this Alternative should be evaluated on a continuous basis and at a

minimum, as new science, information and data emerge regarding the habitats and behaviors of the species.

7. Nothing in this Alternative waives any applicable requirements regarding site-specific environmental analysis, public involvement, consultation with Tribes and other agencies, or compliance with applicable laws.

I. Corrections and Adaptive Regulatory Triggers.

Correction or modification of designations made pursuant to this Alternative may occur under the following circumstances.

1. *Administrative Corrections.* Administrative corrections to the map of lands identified in **Map 3** include, but are not limited to, adjustments that remedy clerical errors, typographical errors, mapping errors, or improvements in mapping technology. The State Director may issue administrative corrections after a 30-day public notice.
2. *Adaptive Regulatory Trigger.* Where two out of the following three criteria are demonstrated within a Conservation Area, excluding areas within the GHZ, the measures in (D) shall apply to the IHZ containing wintering or breeding habitat in the relevant Conservation Area:
 - i. Finite rate of change (λ) over three years starting with the baseline years 2009- 2011 is significantly less than 1.0. This is a moving average for rate of change (i.e. 2011-2013, 2012-2014, 2013-2015, etc.) when compared to 1.0 (indicating a stable population).
 - ii. Number of males on lek routes declines by >20% over a three-year period compared to 2011 values.
 - iii. A 30% or greater loss of sagebrush habitat is documented within defined breeding or winter habitat during a three-year period.
3. *Regulatory Trigger No Longer Necessary.* Where the core population data within the relevant Conservation Area meets or exceeds the 2011 values over a three-year period, areas within the IHZ are no longer subject to the CHZ management provisions.
4. *Emergency Wildfire Clause.* Where a wildfire burns 200,000 acres or more of the CHZ, and at least fifty percent of the burned acres contained important breeding or wintering habitat, the CHZ regulatory provisions in (D) shall apply to the IHZ within the appropriate Conservation Area.

- #### **J. Adaptive Management Measures for Livestock Grazing:**
- Based upon the assessment process, the ecological conditions, the ecological potential and the status of sage-grouse populations, the following measures could be employed singly, or in combination where appropriate, in the development and

implementation of grazing management programs. Flexibility in administering grazing programs and providing offsetting grazing options over relatively large landscapes will help successfully implement these measures.

1. Employ grazing management systems that ensure adequate nesting and early brood rearing habitat within the breeding landscape.
2. When use-pattern mapping or monitoring demonstrates an opportunity to adjust livestock distribution to benefit occupied sage-grouse breeding habitat, include as appropriate herding, salting, and water-source management (e.g., turning troughs/pipelines on/off, extending pipelines/moving troughs) in grazing programs.
3. If available and feasible, utilize exotic perennial grass seedings and/or annual grasslands to avoid breeding season of use of occupied sage-grouse habitat.
4. Modify authorized seasons of use within grazing permits to provide greater flexibility in managing livestock for the benefit of sage-grouse.
5. Where appropriate, maintain residual herbaceous vegetation at the end of the growing/grazing season to contribute to nesting and brood-rearing habitat during the coming nesting season. Table 5.
6. Insure that permittees are informed of management and movement requirements related to avoidance of recent burns, rehabilitation seedings or other restoration sites.
7. Manage grazing of riparian areas, meadows, springs, and seeps in a manner that promotes vegetative structure and composition appropriate to the site. In some cases enclosure fencing may be a viable option. However, recognize the availability and quality of desired herbaceous species may be improved by periodic grazing use of the enclosure.
8. Implement management actions (grazing decisions, allotment management plan/conservation plan development, or other agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. Employ proper grazing management by providing flexibility in scheduling the intensity, timing, duration and frequency of grazing use over time that best promotes management objectives. During drought periods, prioritize evaluating effects of drought in the CHZ relative to grouse needs for food and cover. Ensure that post-drought management allows for vegetation recovery that meets sage-grouse needs in priority sage-grouse habitat areas.
9. When using salt or mineral supplements: a) place them in existing disturbed sites, areas with reduced sagebrush cover—e.g., seedings or cheatgrass sites—to reduce impacts to sage-grouse breeding habitat, b)

where feasible use salts or mineral supplements to improve management of livestock for the benefit of sage-grouse habitat.

10. In general, avoid constructing new fences within 2 km of occupied leks. Where feasible, place new, taller structures, such as corrals, loading facilities, water-storage tanks, windmills, etc., at least 2 km from occupied leks to reduce opportunities for perching raptors. Careful consideration, based on local conditions, should also be given to the placement of new fences or structures near other important seasonal habitats (winter-use areas, movement corridors etc.) to reduce potential impacts.
11. New spring developments in sage-grouse habitat should be designed to maintain or enhance the free-flowing characteristics of springs and wet meadows. Analyze developed springs, seeps and associated pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within priority sage-grouse habitat. Make modifications where necessary, considering impacts to other water users when such considerations are neutral or beneficial to sage-grouse.
12. Ensure that new and existing livestock troughs and open water storage tanks are fitted with ramps to facilitate the use of and escape from troughs by sage-grouse and other wildlife. Do not use floating boards or similar objects, as these are too unstable and are ineffective. Use BMPs to mitigate potential impacts from West Nile virus.
13. When placing new water developments in sage-grouse breeding habitat, choose sites and designs that will provide the greatest enhancement for sage-grouse and sage-grouse habitat.
14. Avoid new water developments in higher quality native breeding/early brood habitats that have not had significant prior grazing use except in situations in which water developments may aid in better livestock distribution across the allotment and will not adversely impact the species.
15. Identify and when feasible, establish strategically located forage reserves focusing on areas unsuitable for sage-grouse habitat restoration or lower priority habitat restoration areas.
16. Monitor for, and treat invasive species associated with, existing range improvements.
17. Consider initiating vegetative manipulation projects where sagebrush canopy cover exceeds optimal characteristics to promote grass and forb understory growth. These projects should only be undertaken where it can be achieved without negatively impacting the species.

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